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CHARLES ELMORE

Supreme Court of the United States

OCTOBER TERM, 1934.

No. 102.

IN EQUITY.

SAMUEL B. SMITH,

Petitioner,

vs.

E. H. SNOW, AND E. H. SNOW, DOING BUSINESS AS SNOW'S HATCHERIES AND SNOW'S INCUBATOR COMPANY,

Respondents.

BRIEF FOR RESPONDENTS.

JAMES F. WILLIAMSON,
RALPH E. WILLIAMSON,
Counsel for Respondents.

Hayward Brief Co., 601-7 Fourth Ave. So., Minneapolis

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IN EQUITY.

ON WRIT OF CERTIORARI TO THE UNITED STATES CIRCUIT COURT OF APPEALS FOR THE EIGHTH CIRCUIT.

SAMUEL B. SMITH,

Petitioner,

vs.

E. H. SNOW, AND E. H. SNOW, DOING BUSINESS AS SNOW'S HATCHERIES AND SNOW'S INCUBATOR COMPANY,

Respondents.

BRIEF FOR RESPONDENTS.

CHAPTER I.

STATEMENT OF THE CASE.

IDENTIFICATIONS.

This is a suit in equity for the alleged infringement of claims 1 and 2 of the U. S. patent No. 1,262,860, entitled "Incubator" granted to the plaintiff-petitioner, Samuel B.

Smith, April 16, 1918, on an application filed by him in the U. S. Patent Office October 26, 1916.

The suit was brought in the Fourth Division of the U. S. District Court for the District of Minnesota. The defenses set up in the defendants' answer were invalidity of the relied upon claims of said patent in suit and the non-infringement thereof by the defendants.

The case was tried in November, 1932, at Minneapolis, Minnesota, before his Honor, Judge Joseph W. Molyneaux, District Judge. The decision of said trial court was filed February 7, 1933 (R. 20-24), not reported in Federal Supplement, but reported in 17 Pat. Quar. 112-114. In his said decision, Judge Molyneaux held the patent to be valid and the relied upon claims 1 and 2 thereof infringed. The said trial court's interlocutory decree (R. 24-26) was signed and filed on February 11, 1933.

From the said interlocutory decree the defendants appealed to the Circuit Court of Appeals for the Eighth Circuit and the cause was heard before their Honors, Circuit Judges Kimbrough Stone and John B. Sanborn and District Judge A. Lee Wyman, at St. Louis, Mo. The decision of said Circuit Court of Appeals for the Eighth Circuit was filed April 12, 1934, is reported in 70 F. R. (2) 564 and appears in the Record (R. 984). The decree of said Circuit Court of Appeals was dated and filed April 14, 1934 (R. 991).

In its said decision and decree the Circuit Court of Appeals for the Eighth Circuit held and decreed that the said relied upon claims 1 and 2 of said Smith patent 1,262,860 in suit were valid but had not been infringed and reversed the decree of said trial court and ordered the bill of complaint to be dismissed.

Petition for rehearing was filed by the appellee (the peti-

tioner here) April 30, 1934, and this petition was denied in an order of said Circuit Court of Appeals for the Eighth Circuit dated and filed May 5, 1934 (R. 1005).

Petition was then filed in this Court for a writ of certiorari directed to the Circuit Court of Appeals for the Eighth Circuit on the general ground that the said Circuit Court of Appeals had rendered a decision in the cause here at bar in conflict with other earlier decisions of the U. S. Circuit Courts of Appeal as to the meaning and scope of claim 1 of the Smith patent in suit.

Three of these alleged conflicting decisions were identified, to-wit:

> The decision of the Ninth U. S. Circuit Court of Appeals in the case entitled, *Herbert A. Waxham, et al., vs. Samuel B. Smith, et al.,* reported in 70 F. R. (2) 457, and now before this Court on a writ of certiorari directed to said Ninth Circuit Court of Appeals.
>
> The decision of the Third U. S. Circuit Court of Appeals in the case entitled, *Buckeye Incubator Co., et al., vs. Hillpot,* and *Hillpot vs. Buckeye Incubator Co., et al.,* reported in 24 F. R. (2) 341.
>
> The decision of the Sixth U. S. Circuit Court of Appeals in the case entitled, *Buckeye Incubator Co., et al., vs. Blum,* reported in 27 F. R. (2) 333.

The petition for writ of certiorari directed to the Eighth Circuit Court of Appeals in the instant case was granted by this Court in an order signed and filed by his Honor, Chief Justice Hughes, October 8, 1924.

The Subject Matter Involved.

On page 20 of the printed document containing Samuel B. Smith's petition for certiorari in the instant case appears the following heading and statement as to the assigned errors intended to be urged by the petitioner, to-wit:

"IV. SPECIFICATION OF ASSIGNED ERRORS INTENDED TO BE URGED.

The errors intended to be urged are:

A. The Circuit Court of Appeals erred in reversing the District Court and holding that the Snow incubator did not infringe claim 1 of the Smith patent-in-suit.

B. That the Circuit Court of Appeals for the Eighth Circuit erred in restricting claim 1 of the patent to a definite order or arrangement of eggs.

C. That the Circuit Court of Appeals for the Eighth Circuit erred in not holding the Smith patent valid and infringed.

D. That the Circuit Court of Appeals for the Eighth Circuit erred in ordering dismissal of the complaint.

E. That the Circuit Court of Appeals for the Eighth Circuit erred in not affirming the decree of the District Court; and

F. That the Circuit Court of Appeals for the Eighth Circuit erred in not granting the relief prayed in the bill of complaint."

On page 16 of the brief recently served and filed in this case on behalf of the petitioner appears the following heading and statement, to-wit:

"THE ERRORS ASSIGNED AND TO BE ARGUED.

The errors assigned in the petition for writ of certiorari and to be argued here are:

1. The Circuit Court of Appeals for the Eighth Circuit erred in restricting claim 1 of the patent in suit to the precise arrangement of eggs described in the specification of the patent.

2. The Court erred in holding that that claim is not infringed."

On comparison of the two different statements, it will be seen that the alleged error now numbered 1 in the petitioner's present brief does not appear in his petition for the writ of certiorari. The nearest approximation is the error which was alleged under the letter B on page 20 of the petition for the writ, but the two statements are, nevertheless, materially different in respect to the limitations stated. In the original petition, it was alleged that the said Court for the Eighth Circuit "erred in restricting claim 1 of the patent to a definite order or arrangement of eggs." In the petitioner's present brief, it is alleged that the said Court "erred in restricting claim 1 of the patent in suit to the precise arrangement of eggs described in the specification of the patent."

It will be seen, therefore, that the petitioner is now, in his present brief, seeking to raise a question which was not authorized in the writ of certiorari. It is, of course, obvious that there might easily be a definite order or arrangement of eggs, without this being the "precise arrangement of eggs described in the specification of the patent."

Obviously, the respondent is under no obligation to consider this new and unauthorized assignment of error.

From the foregoing, it is obvious that the writ of certiorari has brought the instant case here to this Court for review on the merits as to claim 1 of the Smith patent in suit; and that the issues are the same as they were before the trial court and before the Circuit Court of Appeals for the Eighth Circuit, to-wit, the validity and the infringement of said claim.

The Relied on Claim Quoted.

The said claim 1 of the Smith patent 1,262,860 in suit (Italics ours), reads as follows:

> "1. The method of hatching a plurality of eggs *by arranging them at different levels* in a closed chamber having restricted openings of sufficient capacity for the escape of foul air without undue loss of moisture and *applying a current of heated air*, said current being created by means other than variations of temperature and of *sufficient velocity to circulate*, diffuse and maintain the air throughout the chamber at substantially the same temperature, *whereby the air will be vitalized, the moisture conserved and the units of heat will be carried from the eggs in the more advanced stage of incubation to those in a less advanced stage for the purpose specified.*"

NOTE:

The structure of the machine of the Smith patent in suit and the hatching method disclosed therein is set forth in Chapter III of this brief.

The structure of respondents' machine and the hatching method carried out therein is set forth in Chapter IV of this brief.

CHAPTER II.

SUMMARY OF ARGUMENT.

It is our general contention that claim 1 of the Smith patent 1,262,860 in suit must be given the meaning accorded thereto by the Circuit Court of Appeals for the Eighth Circuit in the instant case—70 F. R. (2) 564.

More specifically stated, it is our contention that said claim 1 of said patent is limited, (a) by the disclosure of the patent itself; (b) by the prior art, including the patentee, Smith's, own prior public usage at dates more than two years before he applied for his patent, the proven prior patents and publications; (c) by the estoppels arising from the file wrapper record of the patent; and (d) by prior adjudications of the same claim of said patent by the U. S. Courts; in each and all of the following respects:

1. To a method of hatching eggs wherein air in a current form is caused to circulate within a chamber containing eggs. (This is not the same as forced draft.)

2. To a method of hatching eggs wherein a column of air is caused to move through a column of eggs.

3. To a method of hatching eggs wherein a special type of stage incubation is used including the shifting of eggs from one position to another successively as the incubation of the eggs progresses.

4. To a method of hatching eggs wherein a special type of stage incubation is used including locating the eggs in the earlier stages of incubation together in the upper part of a chamber and locating the eggs in the later stages of incubation together in the lower part of the same chamber.

5. To a method of hatching eggs wherein the air circu-

lated in a chamber containing eggs is confined to travel in definite paths by means of curtains or equivalent partitions.

6. To a method of hatching eggs wherein vitalized air is caused to move first to eggs in an advanced stage of incubation and thence to eggs in an earlier stage of incubation.

As a corollary to the above, it follows that respondents' method of hatching eggs does not infringe the relied on claim of the patent, if it does not respond in respect to each and all of the above specified limitations. It is respondents' contention that the hatching method used by respondents does not respond to the claim, when given its true meaning, in respect to any one of the above listed limitations.

To establish the above specified contentions, respondents will consider the disclosure of the Smith patent, the prior art, the file-wrapper record of the patent and the prior adjudications of the patent, in the order named, and will then, after the true meaning of the claim has been fully pointed out, consider the question of infringement of that claim.

Great emphasis, in the argument in this brief, is laid upon the limitations imposed upon the claim by the disclosure in the patent itself, for two reasons:

1. The Circuit Court of Appeals for the Eighth Circuit, in the instant case, did not deem that it was necessary to go beyond the face of the patent to find that claim 1 was so limited in scope that it was not infringed by respondents.

2. Petitioner rests his entire contention for infringement on a *false premise*. In petitioner's brief, page 6, it is stated:

> "It is a further essential that the process must be carried out in a substantially closed chamber in which the air passes over and over the eggs in repeated circuits or closed cycles."

Page 7, it is stated:

> "This means that the air is passing in repeated cycles over and over again through the same mass of eggs."

Page 8, it is stated:

> "It will also be observed that, if the air is moving in a closed cycle through the incubator, the position of the fan in that cycle is wholly immaterial."

Then on page 17, petitioner's brief writers make the following conclusion:

> "As substantially the same air repeatedly moves over all the eggs again and again, it is entirely immaterial in what order the eggs in different stages of incubation may be in the incubator. The currents of air persisting throughout the chamber transfer the heat from the older eggs to the fresher eggs no matter what the arrangement of the eggs may be."

By petitioner's statement that the air moves over and over the eggs in repeated closed cycles, it is necessarily implied that there is no beginning or end of a circuit of air travel and it is therefore necessarily implied that the air passing through and about all the various eggs at every point in the air circuit is in the same condition. It is further implied that the air is recirculated in the same condition in the hatching chamber after having been before circulated. That petitioner's said premise is false and that no air is ever recirculated in closed cycles or in the same condition in the hatching chamber or that the air passing through and about all the various eggs is not in the same condition at every point in the air cir- uit, is evident from the disclosure of the patent and this will be pointed out in the next chapter of this brief. As petitioner's said premise, as to air movement in closed cycles, is false, his conclusions based thereon that

the claim is not limited either to a columnar circulation of air through a column of eggs or to any special type of stage incubation or to a method wherein air is confined to travel in definite paths by means of curtains or equivalent partitions or to a method wherein vitalized air is caused to move first to eggs in the advanced stage of incubation and thence to eggs in an earlier stage of incubation is also false.

CHAPTER III.

ARGUMENT.

THE TRUE MEANING OF RELIED ON CLAIM 1 OF THE SMITH PATENT IN SUIT.

The Problem of Egg Incubation.

Before considering the Smith patent in detail, it is essential that certain vital facts governing egg incubation should be understood. These facts are concisely and correctly summarized by his Honor, Judge Stone, in the decision of this case by the Circuit Court of Appeals for the Eighth Circuit. These facts are not disputed by petitioner and they cannot be disputed. We, therefore, quote from Judge Stone's reported decision, 70 F. R. (2) 564, pp. 565-566:

> "The patent and this controversy are comprehended only if certain basic facts which govern incubation are understood. These have to do with the proper development of the embryo of the egg into a chick and, of course, depend upon the features of such development existing naturally in the egg. During the twenty-one days necessary for complete incubation, the problem requires consideration of the vital effects of temperature, moisture, and ventilation. Temperature is involved because development of the embryo requires a temperature of about 100 degrees Fahrenheit and this requirement continues during the entire incubation period. The maintenance of this desirable temperature is complicated by the fact that the temperature disposition of the egg changes during incubation. During approximately the first half of the incubation period the egg is receptive of heat from a surrounding temperature of 100

degrees while during the last half it is giving off heat under" (unto) "such surrounding temperature. This change is fairly regular and is progressive. Because of this change in the temperature characteristic of the egg at different stages of incubation, it is obvious that temperature control—that is, maintenance of all eggs at all times at about 100 degrees—presents a different problem depending on whether the eggs in the incubator are all at the same stage or are at different stages of incubation. Smith addressed himself to the situation where the eggs were in all stages of incubation. His problem, therefore, was to supply about 100 degrees of heat to all eggs in the first half of the incubation period stages and to remove from those in the later stages any excess over 100 degrees—to maintain all eggs at about 100 degrees.

Moisture was another element of the problem because while eggs constantly give off moisture, the chick will be below normal if this evaporation takes place unduly. In short, it must be controlled and kept normal. Ventilation is important because the incubating eggs give off enough carbon dioxide to be harmful if it is not released. Since Smith was concerned with eggs which were at all stages of incubation, these features of moisture and ventilation were constantly present. His entire problem was to maintain a temperature for all eggs of about 100 degrees with provisions for maintaining the proper moisture conditions and for sufficiently purifying the air of the carbon dioxide."

SECTION 1. THE TRUE MEANING OF CLAIM 1 AS DETERMINED FROM THE PATENT ITSELF.

Disclosure of the Smith patent No. 1,262,860 in suit.

The Circuit Court of Appeals for the Eighth Circuit in the instant case took a correct view of the Smith patent in suit and in its decision, 70 F. R. (2) 564, it held that claim 1 of the patent was not infringed by respondents. Judge Stone very carefully considered the disclosure of the patent, and, without going any further than the face of the patent itself, based said Court's entire decision on the ground that the disclosure necessarily limited claim 1 to such a narrow meaning that non-infringement was clearly established. It, therefore, is necessary that a correct understanding be had of what the Smith patent in suit discloses.

All of the statements made by Judge Stone in the decision of said Court are correct, but, in view of the petitioner's fallacious contention, to which attention was called in the last part of the last previous chapter, it is necessary to trace the disclosure more in detail, than was done by Judge Stone, in order to bring out the true operation of the machine when in use for hatching eggs, according to the method disclosed in said patent. We will, however, make the discussion as short as possible.

The said Smith patent purports to disclose an "improved apparatus and method" for hatching eggs in large quantities. The drawings illustrate and the specifications describe a machine which constitutes the apparatus referred to in the first sentence of the second paragraph of the specification. In substance, it is represented or implied that, in the operation of this machine or apparatus, the alleged improved method of hatching eggs is carried into effect.

(a) *As to the Structure of the Machine.*

Said Smith machine includes the hereinbelow named mechanical elements related as hereinbelow stated:

A large rectangular casing, or walled chamber 2, corresponding in size to an ordinary room. The interior of this casing is subdivided by two vertically disposed curtains 3 and 4 spaced apart from each other, and from the side walls of the casing, thereby dividing the casing into a central compartment or corridor 5 and two side compartments numbered, respectively, 6 and 7. Said casing 2 has a door 8 in its front vertical wall opening into the corridor 5. In each of said side compartments 6 and 7 are suitably mounted a plurality of vertical tiers of racks adapted to support mesh-bottomed trays (see Fig. 2), with the trays superimposed, one above the other, and slightly spaced apart from each other. The three racks nearest to the upper ends of said side compartments 6 and 7 and the three racks nearest to the bottom of said respective compartments 6 and 7, are stationary racks adapted to removably hold trays in horizontal positions. The racks disposed between the said two sets of stationary racks of each tier are called "tilting racks 10," and these are suspended by links 11 from overhead supports in such a way that the said racks, and the egg-containing trays carried thereby, can be tilted so as to make the trays take positions inclined to the horizontal plane. A portion of one of these tilting racks is illustrated in Fig. 4.

The central compartment or corridor 5 has, a short distance below its top, a cross partition or ceiling made up of trap doors 19 hinged to one of the upper side walls 22 of said corridor and adapted to be latched to the other side wall when in horizontal position; and which trap doors support a series of propelling fans 18 disposed with their axes in the

vertical plane and the blades of which fans extend downward through holes 20 provided in the said trap doors 19. The top wall of the casing 2 is double with the two plates thereof spaced apart from each other in a vertical plane. The lower plate of said top wall, the sections 22 of the corridor walls and the trap doors 19 define a space or chamber 21, above the said trap doors or ceiling of the corridor, in which are mounted coils of heating pipes 23 and above the lower plate of the top wall of the casing is located a valve-controlled steam supply pipe or jet 26 for moistening the air (see Fig. 3 and lines 34 to 43, page 2 of the specification). That portion of the lower plate of the top of the casing, which affords the top wall of said chamber 21, is provided with valve-controlled air inlet openings 24 immediately above the respective fans 18. There are two of these valved openings 24 illustrated in the drawings and they both communicate with the exterior atmosphere through a large open hole in the top wall of the casing (not numbered). Fresh air can thus reach the chamber 21. The top wall of the casing is also provided with used air outlets, shown as in the form of open-ended thimbles or pipes 28, the lower ends of which are in communication with the spaces above the tiers of trays within the side compartments 6 and 7, and which spaces are, in turn, in communication with the chamber 21 which contains the fans and the heating coils, hitherto noted. The used air replaced by the fresh air can thus get out of the machine. As shown, the air inlet openings 24 have an area equal to the conjoint area of the air outlets 28.

In lines 97 to 105, page 2 of the specification, it is stated that any suitable thermostatic means may be employed for regulating the temperature, and that this thermostat might be of the kind commonly used in incubators, such as is illus-

trated in the patent there identified, and it is further stated that the thermostat would be "suitably connected" to the valve controlling the steam or hot water, as the case may be, which passes through the pipes 23, obviously to supply heat when the temperature in the incubator falls below a certain point and to cut off the supply of heat when the temperature in the incubator rises above that point.

Having regard to the spaces 27 between adjacent pairs of the tilting racks 10, as shown in Fig. 3 of the drawings, they are *closed* at their lower ends by strips of flexible fabric, there marked 28 (although this was a duplication of that number), and, in lines 53 to 64, on page 2 of the specification, it is stated that these spaces 27 are thus closed at their lower ends so as to *compel* the air to circulate *through the mesh bottoms* of the trays and around and about each egg in the lower trays of the tilting racks.

By reference to the drawings, it will be seen that the two suspended curtains marked, respectively, 3 and 4, hang directly alongside and close to the inner ends of the trays and have such vertical dimensions that their lower ends or edges are located below the uppermost of the lower sets of stationary hatching trays.

Hence, the portion of said corridor 5 below the fans 18 is only in communication with the said side compartments 6 and 7 in the zone below the lower ends or edges of said curtains 3 and 4. No modification of structure is disclosed or suggested.

(b) *As to the Stated Mode of the Smith Machine's Operation.*

It is said that the "method of heating is such that the heated air is adapted to the eggs in various stages of incubation." It is also said, "There is a forced circulation of hot air through the chamber which is adapted preferably to maintain all eggs at temperatures between 100° and 105° Fahrenheit, approximately" (page 1, lines 13 to 19). It is also stated, page 1, lines 19 to 40 (Italics ours, in all quoted portions of this brief unless otherwise specifically stated):

> "* * * and *this improved system contemplates that fresh eggs will be placed in a horizontal plane,* preferably by means of trays supported in horizontal planes, *and after the eggs have been subject to the circulation of hot air for a predetermined time* (the air circulating largely around the eggs) *they will be placed in a tilted or inclined position in a different location* but still subject to the same *column of air* and at this period of incubation they will be tilted in different planes at regular intervals during the time they remain in this latter position, *and after they have remained for a predetermined time they will be again moved to a different position with reference to the forced circulation of hot air* and so placed therein that the air will tend to keep the eggs below 105° temperature, *and in this last named position the air will be forced to pass between the different eggs and will in effect act as a cooling medium for the eggs.*"

This means, of course, that the eggs, when they are first placed, in fresh condition, in the incubator, will be placed in a horizontal plane in trays supported in the upper horizontal groups of three stationary racks in the side compartments 6

and 7. Then after the eggs have been subject to the hot air circulation for a predetermined time, they are moved down to be received within the upper tray spaces of the tilting racks 10 in the side compartments 6 and 7. As the eggs progress in incubation they are moved down from upper tray spaces in the tilting racks to lower tray spaces and subjected to the same *columnar* circulation of air, whereupon they are eventually moved to the bottom tray spaces in the tilting racks, the fabric strips numbered 28 in Fig. 3 of the drawings closing the lower ends of the spaces 27 forcing the air to pass between the different eggs and act as a cooling medium for the eggs. It should be noted that the above quoted portion of the specification in parenthesis, line 25, page 1, makes it clear that when the eggs are held in the upper horizontal racks the air circulates largely around the eggs rather than through the egg trays and between the different eggs, while when the eggs are in the lower portions of the tilting racks, care is taken to cause the air to pass between the different eggs so as to act as a cooling medium for the eggs. In other words, the eggs in the early stages of incubation are given a different air treatment than the eggs in the most advanced stages of incubation and this is for the particular purpose of preventing the eggs in the more advanced stages from being burned up as will be brought out more clearly later in this brief.

Going on with the description in the patent, it is further stated, page 1, lines 40-54:

> "The temperature of circulating air should be such as will prevent the eggs in the early stage of incubation from falling below 100° and *the speed or velocity of the circulating air should be such as to carry the heat away from the eggs in the later stage of incubation* and there-

by hold the temperature of those eggs at 105° or slightly below that * * * but the air is impelled with sufficient velocity to carry the heat away from the eggs which happen to be in the advanced stage of incubation."

It should be here again noted that the patentee emphasizes the velocity of air circulation for carrying the heat away from the eggs in the later stage of incubation, but he does not emphasize velocity of the circulating air for raising the temperature of the eggs in the earlier stage of incubation. In other words, he makes it clear that by reason of the fact that the heated eggs in the advanced stage of incubation are placed together in the lower part of the tilting racks, the air must be circulated rapidly between these eggs to carry off the heat units.

Page 1, lines 87-104, read as follows:

"These trays are provided with open mesh bottoms 14 upon which the smaller ends of the eggs rest in close and solid formation, and each tray of eggs occupies the upper rack 9 for the first three days, and is then transferred to a place in the upper end of the tilting rack 10. *During the next fifteen days the trays in the tilting rack are shifted from higher to lower planes* therein and tilted at frequent intervals to stand in oppositely-inclined positions. The tilting of the eggs is preferably arranged to put the eggs substantially on their sides. When the eggs in the lower-most trays in the tilting racks 10 are about ready to hatch each tray is transferred to the stationary rack 12 where the chicks may be removed as occasion requires."

The patentee here describes the special form of stage incubation that he uses in his process. Nowhere in the patent is

there a description of any other type of stage incubation that could be used, nor is there described or suggested any other manner of handling the eggs in the incubator.

Lines 11 to 50, page 2 of the patent specification, read as follows:

> "The fans or series of fans 18 mounted upon the hinged trap doors 19 forming the ceiling of the central corridor 5 constitute the means for forcing the hot air through the chamber and there are circular openings 20 provided in said doors within which the fans are arranged properly. The longitudinal space 21 above the fans has open communication above the side walls 22 with the upper ends of the rack compartments behind the curtains 3 and 4 *and these curtains extend a sufficient distance,* as indicated in Fig. 1, *to cause the heated air distributed by the fans to pass downwardly through the central corridor to a point near the bottom of the chamber where it can pass into the space occupied by the trays.* As explained later *the trays near the bottom are preferably arranged so that the air is forced to pass between the eggs in each tray thereby cooling or holding the temperature of those eggs down.* Thence the air passes into spaces above the lower series of trays until it reaches the distributing space 21 above the fan. Coils of heating pipe 23 are arranged in the space 21 to heat the air and *more or less fresh air may be taken in through the valved opening 24 above the space 21* and *this fresh supply of air may be charged with steam* to a greater or less degree by means of a valve controlled jet or pipe 26, see Fig. 3. The outlets 28 for the release of *foul air* are made of such restricted capacity as to prevent the undue escape of moisture. It is possible to

limit the openings and so conserve the moisture *by reason of the vitalizing effect of the power driven current* upon the body of the air within the chamber."

In this same section of the specification of the patent, it is made clear that the curtains are used to cause the air to be carried downwardly to such a point that the air will be first carried to the hot eggs in the lowermost portions of the tilting racks, so as to cause the air to be forced between the eggs in these trays to cool the eggs. In other words, one purpose of the curtains is to prevent the air circulated by the fans from moving freely into the spaces occupied by the upper or cooler eggs until this air has first passed to the hot eggs in the lowermost trays of the tilting racks to cool the eggs in those trays. Attention is also called to the fact that the air so circulated is vitalized by fresh air and moisture in the space 21 just before it enters the fans and is driven downwardly by the fans through the corridor between the curtains. By reason of the confining action of the curtains, the vitalized air is made to pass first to the eggs in the later stage of incubation, *i. e.*, the eggs in the lower parts of the tilting racks, before that vitalized air is allowed to pass to the eggs in the earlier stage, *i. e.*, the cooler eggs in the upper portions of the tilting racks.

Page 2, lines 56-78 of the patent specification, read as follows:

"* * * and it will be also noted that the vertical spaces 27 between the adjacent tilting racks 10 are closed at their lower ends by flexible strips of fabric which are attached to and extend upward at each side of each rack so as to compel the air to circulate through the mesh bottom and *around and about* each egg as heretofore referred to, and as the eggs further advanced in

incubation are contained in these lower trays and as the danger is that the temperature will rise in these eggs to a point injurious to incubation *the improved method disclosed herein* permits the circulating air to act as a medium to prevent the overheating at this stage of incubation and *this is accomplished by promoting an induced draft within the lower trays.* It is obvious that the fans can be so arranged and can be operated at such speed as to cause the hot air to circulate fast enough to keep the temperature throughout the chamber between the limits of 100° and 105°."

Here it will be noted the inventor defines his improved method as one wherein an induced draft is promoted within the lower trays, *i. e.*, the trays containing the heated eggs in the later stage of incubation. It will be also noted that the patentee specifies the fabric strips closing the spaces at the lower ends of the tilting racks, as being used to compel the circulation around and about each egg in the lower trays. It should be further noted that there is no statement made that by speeding up the fans the desired circulation can be obtained *without the use of curtains.*

Having described in detail the mode of operation of his machine, and the method of hatching eggs carried into effect thereby, the patentee in the paragraph of the patent beginning line 79 and ending in line 96, of page 2, defines in definite terms what his improved method is. This paragraph reads as follows, and it is the key to the meaning of the relied on claim 1 of the patent:

"It, therefore, appears that the improved apparatus and *method contemplates* the application of *hot air circulating in a column* with such speed as to keep the temperature substantially uniform and *so arranging the*

eggs that the fresh eggs *are placed at one point in the column of air and held in a horizontal plane until they reach a predetermined stage of incubation* and *then put at a different point in the same column* of air and kept in planes inclined to the horizontal and *thereafter placed at such a point in the column of air that the forced draft* of air *acts to hold the eggs at a uniform temperature* and to prevent them from becoming overheated and thereafter placing the eggs into final position for the hatching operation."

To What the Disclosed Process of Hatching Eggs is Confined.

So far, with few words of comment, we have allowed the drawings and the descriptive portion of the specification to speak for themselves. The limitations on the method of incubation disclosed in the patent may now be understood.

The Disclosure of the Patent is Limited to a Special Type of Stage Incubation.

Obviously the eggs are so set and handled that a special type of stage incubation is present. It is true that the eggs are set at different times and hatched at different times, which is the definition of stage incubation from the broad point of view. It is also true that eggs of different ages are placed in the same chamber so that heat from the hotter eggs assists in heating the cooler eggs. But the patent disclosure is not broad enough to cover any type of stage incubation where eggs at different ages are placed in the same chamber for hatching as contended for by petitioner. The patent states that when the eggs are first set, they are placed in trays in horizontal planes in the upper stationary hori-

zontal racks. After the newly set eggs have been subjected to the column of air circulating around the same for some time, they are shifted downwardly to the upper tray spaces in the tilting racks and as incubation progresses, the trays of eggs are successively shifted downwardly, from time to time, in the tilting racks, from upper to lower levels until, toward the end of the hatching period the eggs in the most advanced stage of incubation are located in the lower tray spaces of the tilting racks. As the eggs take on heat from the air, during approximately the first half of the incubation period, and as they give off heat to the air, during approximately the latter half of the incubation period, the cooler eggs, that is the eggs in the earlier stages, taking on heat, are always grouped or massed together in the upper stationary racks and in the upper portions of the tilting racks; whereas the eggs in the later stages, giving off heat, are always grouped or massed together in the lower tray spaces of the tilting racks with the very hottest eggs, *i. e.*, the eggs in the most advanced stage of incubation at the bottom. When the eggs have been in the incubator for eighteen days, they are moved from the tilting racks to the stationary hatching racks in the bottom of the incubator where the chicks break their shells.

The stage incubation above just described, is the only type of stage incubation disclosed in the Smith patent. Repeated references in the description are made to this particular type of stage incubation and no reference is made to any other type.

The Claim Does Not Call for Stage Incubation Except by Inference.

The first portion of claim 1 of the patent reads as follows:

> "The method of hatching a plurality of eggs *by arranging them at different levels* in a closed chamber * * *."

Mere arrangement of eggs at different levels in a closed chamber is not stage incubation. The claim does not specify in so many words that the eggs at different stages of incubation are arranged at different levels.

There is nothing further in the claim to show or imply that stage incubation is one of the essential elements called for until the "whereby" clause is reached at the end of the claim. This "whereby" clause reads as follows:

> "* * * whereby the air will be vitalized, the moisture conserved and *the units of heat will be carried from the eggs in the more advanced stage of incubation to those in a less advanced stage for the purpose specified.*"

This "whereby" clause in the claim presupposes that the eggs are set in stage incubation and when it is interpreted with the first portion of the claim above quoted, it can only mean that the eggs in the more advanced stage are at one level and the eggs in the less advanced stage at another level, the arrangement of the advanced stage eggs and the less advanced stage eggs being such that the air will circulate first to the eggs in the advanced stage and then to those in the less advanced stage. In other words, *the claim does not call for stage incubation in so many words, but it implies stage incubation and it refers back to the descriptive portion of the specification to obtain the meaning of the stage incubation implied.* As only one type of stage incubation is dis-

closed in the patent, namely the type where the eggs are set from day to day in the upper portions of the egg racks and shifted successively downwardly as incubation progresses so as to group the eggs in the earlier stages together and to group the eggs in the later stages together in order to carry the air from the eggs in the later stages to the eggs in the early stages, it is clear that the stage incubation of the claim must be the stage incubation defined and disclosed in the patent and that only. The claim is therefore limited to a special type of stage incubation wherein the eggs are shifted from one position to another successively as the incubation of the egg progresses. The claim is further limited to a special type of stage incubation wherein the eggs in the earlier stages are grouped together in the upper part of a chamber and the eggs in the later stages of incubation are grouped together in the lower part of the same chamber. That is the only way in which the whereby clause of the claim can be realized.

The Patent Discloses that the Air is Never Recirculated in Closed Cycles—No Air is Ever Recirculated in the Same Condition True Circulation Stated.

Petitioner's brief writers have set up the fallacious contention that the relied on claim 1 of the patent is not limited in respect to the movement of air first to the eggs in the more advanced stage of incubation and then to those in the less advanced stage. In an attempt to establish this contention, they have advanced the theory that the Smith patent discloses that the air passes over and over the eggs in closed cycles, necessarily implying that there is no beginning or end of the air circuit and that the air after making one circuit is thereafter always recirculated in the same condition.

This is a fallacy that is self-evident from the patent itself.

By reference to Fig. 3 of the drawings of the Smith patent, it will be seen that the valve controlled steam inlet pipe 26 delivers the steam into the space between the upper and lower plates of the double walled top of the casing, and by reference to Fig. 1 of the drawings, it will be seen that the upper or outer member of said two walls has a large fresh air intake opening, through which the fresh air sucked in by the fans, gets into the said space between the two plates of the top of the casing. This incoming fresh air is, therefore, moistened by the steam from the jet 26, before it reaches the inlet openings 24 and enters the chamber 21.

Now let it be assumed that the eggs have been set in the machine disclosed in the Smith patent and that the machine is in action. Then, the gist of the machine's mode of operation can be briefly stated as follows:

All of the incoming fresh air is moistened by steam from the steam jet 26 within the space between the two walls of the double walled top of the casing and thereafter, if the thermostat calls for heat, said air is heated by the steam coils 23 when it gets into the chamber 21 above the ceiling of the corridor 5. The incoming fresh, moistened and sometimes heated air will be joined in the chamber 21 by such portion of the used air as is drawn by the fans from between the side walls or beams 22 and the lower plate of the double walled top 25 of the casing, or in other words, by that part of the used air drawn from the upper parts of the compartments 6 and 7 by the fans,—after part of the used air in these compartments has exhausted to the atmosphere through the outlets 28. The used air so drawn from above the egg trays into the chamber 21 will be commingled with the fresh, moistened air admitted to this same chamber

through the inlet openings 24 and this fresh, moistened air *will vitalize* the used air with oxygen and moisture, so that *all the air forced downwardly by the fans is vitalized air*. In view of the size of the air inlet openings 24 as compared to the passages between the walls 22 and the lower plate 25 of the double walled top of the machine and also in view of the fact that the fans 18 are respectively located immediately below the two fresh air inlet openings 24 and run at high speed, the proportion of fresh air, drawn in, moistened and mixed with the used air in the chamber 21 must necessarily be large.

At the trial of the case, the respondents introduced into evidence as "Defendants' Exhibit H" a commercial specimen of the Smith incubator, made by the Smith Incubator Co., sold by that Company to respondents, and owned by respondents. It was not denied by petitioner that this machine "Exhibit H" commercially embodied the invention of the patent. This machine "Exhibit H" was tested by respondents' expert, Prof. Rowley, in *inter partes* tests prior to the trial and in explaining his tests made on that machine, Prof. Rowley (R. 195) testified that the said machine had a central fresh air inlet opening of 10 inches in diameter and that the velocity of air movement through the said opening was 412 feet per minute. The correctness of this statement was not challenged. This opening was unrestricted by valves or dampers in the commercial machine. By simple mathematical computation therefore (multiplying the area of the fresh air opening, $\frac{\pi D^2}{4}$ or $\frac{3.1416 \ (10)^2}{4}$, by the velocity of air travel in inches per minute, 412 times 12), it is found that fresh air was introduced into that commercial "Smith machine Exhibit H" to the extent of *388,302*

cubic inches of fresh air per minute. By actual measurement of respondents' specimen of the Smith machine, "Exhibit H" introduced into evidence, it is found that the interior dimensions of the machine are approximately 12 feet 6 inches long by 9 feet 6 inches wide by 7 feet 6 inches high. By simple mathematical computation therefore (transposing the figures to inches and multiplying them together), the cubic content of that machine "Exhibit H," without considering the large space taken up by eggs, egg trays, racks and other equipment within the machine is 1,539,000 cubic inches. By comparison of the amount of fresh air admitted to the machine per minute with the cubic content of the machine, it is found that *there is admitted* to the machine *during each minute* of its operation a quantity of *fresh air equal* approximately to *one-fourth the internal volume of the entire incubator.* If the space occupied by eggs, egg trays, racks, fans and other equipment in the machine is deducted from the internal volume of the machine in cubic inches, to secure a fair comparison, it will, of course, be found that the ratio of fresh air admitted per minute to the total space occupied by air in the machine is much higher. It is, therefore, *conclusively proved that the quantity of fresh air admitted in the commercial Smith machine is large.*

Petitioner's brief writers on page 8 of petitioner's brief, made the following statement:

> "In the operation of the Smith commercial machines, this interchange of foul and fresh air is only *one-half of one per cent* of the total volume of air in circulation (Vol. I, p. 68)."

Elsewhere in petitioner's brief, statements are made to the effect that the air interchange in both the Smith machine and respondents' machine is only one-half of one per cent.

This is an incorrect statement of the evidence in the case. On page 68 of the record, petitioner's expert, Mr. Taggart, when testifying about the Smith patent and the Smith commercial machine, gave the following answers to the following questions:

> "Q. What is the percentage, actual percentage of total air in the circuit which passes, which is interchanged from outside to inside?
>
> A. I didn't explain the openings for the intake of fresh air and discharge of foul air. Above each side, as shown here, there is a restricted opening for the intake of a certain amount of fresh air, and above each egg column there is shown an opening 28, with a discharge of foul air.
>
> The Court: Will enough air reach in there so that the foul air will escape in preference to the other air?
>
> The Witness: No, sir, *there is an interchange of from one to three per cent of air in actual operation every time.* In machines of our own manufacture that we are putting on the market at the present time we hold that exchange of air down to one-half of one per cent. We have never put machines out that have over about *three per cent.*"

In other words, Taggart himself admitted that the interchange of air was from one to three per cent. He failed to specify, however, the time period in which this interchange took place. His statement is therefore meaningless. As proved above, the air interchange in one of the Smith commercial machines that respondents owned was over twenty-five per cent per minute.

The quantity of fresh air admitted into the machine of the Smith patent and moistened before reaching the fans, is im-

portant for the reason that this air is relied upon to vitalize all the air in the machine driven down into the corridor by the fans. The cycle of air movement is begun in the chamber 21 above the ceiling of the corridor 5 of the patented structure where the fresh moistened air is mixed with the used air to be circulated.

Referring back again to the mode of operation of the machine of the patent, the propelling fans 18 deliver the vitalized body of air to the corridor 5 in conical columns or streams with the smalier ends of the said conical columns at the upper ends thereof directly below the blades of the fans, and inasmuch as those fans run at approximately 1,750 revolutions per minute, those columns of air will be made to travel downwardly at high speed and under considerable pressure. The curtains 3 and 4 define a restricted space, and the only space through which these columns of air can travel downwardly in said corridor, under the propelling action of the fans, and hence, said columns of air must travel clear down to the zone of the corridor which is below the lower edges of said curtains, whereupon said columns of air will strike the floor of the corridor and be thereby deflected laterally into the lower ends of the side compartments 6 and 7 beneath the lowermost trays holding the incubating eggs, and will then pass on upward in columnar form through the mesh bottoms of the tiers of superimposed egg containing trays and into the spaces above said tiers of trays and below the lower plate of the top wall of the casing. From those spaces directly above the said tiers of trays, a considerable quantity of the used air (called "foul" in the specification) will be discharged to the atmosphere through the outlets 28 in the top of the casing, and the remainder of the used air will move onward into the chamber 21 to complete the cycle

of air movement. Each time fresh air meets and commingles with used air a new cycle of air movement begins, for the reason that the used air moving into the chamber 21 above the fans is never recirculated into the corridor, and thence, to the eggs *in the same condition* that it is in when it is drawn into the chamber 21 after having passed through the eggs in the egg trays. It is revitalized by moist, fresh air in the chamber 21 above the eyes of the fans and when the thermostat calls for heat it is also heated in this chamber by the heating coils 23 before being passed onto the corridor and then to the eggs in the egg trays. The air action in the machine is continuous, but *the same air is never recirculated in continuous cycles in the same condition.* On the contrary, some of the used or so-called "foul" air is discharged and carries out with it enough of the carbon dioxide emitted by the eggs to prevent injurious accumulation of this carbon dioxide, and a corresponding amount of moistened fresh air is drawn in and commingled with the portion being re-used and this serves to vitalize the whole composite body of air which is propelled into the corridor 5 by the fans 18.

Now, if the manner of setting and handling the eggs in stage incubation in the Smith patent is recalled, to-wit: That the fresh eggs are first placed in horizontal planes in the upper horizontal stationary racks and then that these eggs are next shifted to the uppermost tray spaces of the tilting racks and thereafter shifted step by step downward until they reach the lowermost tray spaces of the tilting racks, so that the eggs in the most advanced stage of incubation are at the lowest level and those in the earlier stages of incubation are at higher levels, then it is perfectly clear, from the machine's mode of operation above described, *i. e.*, the hatching method, that the vitalized air always first

strikes the eggs in the most advance stage of incubation and then strikes the eggs in the earlier stages of incubation thereby carrying off the heat from the eggs in the advanced stages and delivering some of this heat to the eggs in the earlier stages as stated in the Smith patent and as held to be essential to the hatching method defined in claim 1 of the patent by the Circuit Court of Appeals in the present case.

When it is understood that the heated eggs in the advanced stages of incubation are grouped or massed together in the lower portions of the tilting racks, and that it is these eggs that are giving off the greatest quantities of carbon dioxide and that it is, therefore, to these same eggs that the greatest quantities of fresh air and moisture must be supplied to prevent the embryo chicks from dying therein and that it is these same eggs "between which" air must be rapidly circulated to keep them in cool condition, then it is clear why it is essential that the air vitalized by the moist, fresh air admitted through the inlet openings above the eyes of the fans must be circulated first to the eggs in the most advanced stage of incubation and then to the eggs in the less advanced stage. It is also clear why the patentee stressed this particular type of air circulation of the vitalized air first to the eggs in the advanced stage of incubation and then to those in the less advanced stage in the specification of his patent and made it clear that he contemplated no other type of air circulation. The thermostat is automatically cut out so that no heat is supplied to the heating coils during the major part of the time that the incubator is in full operation. Also, the fresh air supplied through the air inlet openings is normally at a temperature considerably below 99° to 100°, the temperature at which the incubator is maintained. From these facts, it will be appre-

ciated that the fresh air which acts with the moisture to vitalize the air circulated, also acts to cool that portion of the air moving first to the eggs in the advanced stages to thereby assist in carrying off the heat units therefrom. In other words, this cooling effect produced by the fresh air admitted makes it still more positive that the air must be circulated first to the eggs in the most advanced stage and then to those in the less advanced stage if the disclosed process of hatching is to be carried out.

To be sure that the vitalized air will strike the eggs in the most advanced stage first, and carry off the heat therefrom, and supply these eggs with the requisite moisture and fresh air for successful hatching, the patentee uses his curtains 3 and 4 so as to prevent the vitalized air from moving from the corridor to the eggs in the less advanced stages before the air first struck the eggs in the most advanced stage. He also uses these curtains to assure a high velocity of air travel about and between the eggs in the most advanced stages. From the corridor where the air travels at the greatest speed, the air is caused by the curtains to move into and between the lowest eggs in the egg tiers whereupon the velocity of air travel, after the eggs in the most advanced stages are struck, is naturally reduced by the obstructions in its path. This is shown in the test data of the plaintiff's commercial machine prepared by plaintiff's expert witness, Mr. Taggart, in "Plaintiff's Exhibits 7, 7a and 7b" (R. 449 to 453) wherein anemometer readings, showing the speed of air movement, indicate that the speed of air travel to the lowermost egg trays is much greater than the speed of air travel through the uppermost egg trays. Without this extra velocity in the lowermost egg trays, and without the supply of fresh, moistened air, *i. e.,* vital-

ized air, to the eggs therein, these eggs would burn up and kill the embryo chicks therein. The curtains or corresponding partitions are accordingly, therefore, essential to the Smith hatching method to assure the movement of the vitalized air first to the eggs in the most advanced stage of incubation and then to the eggs in the less advanced stage of incubation.

Judge Stone states in the Circuit Court of Appeals decision in this case, after quoting from the patent and discussing the method disclosed therein 70 F. R. (2) 567, as follows (Italics ours):

> "From the above description it is evident that the disclosure was of a method embodying two coacting elements: A column of eggs in trays wherein the trays would be *progressively located in three different locations* beginning with the fresh eggs, then in a second location and finally in a last location; the circulation, through or around the eggs in the column, of temperature controlled heated air (with moisture and ventilation provision) in such manner as to carry off the surplus heat units from the advanced eggs to those less advanced."

Judge Stone then goes on to discuss the three claims of the patent, distinguishes claim 3 from claim 2, holds that claim 2 cannot be infringed by the Snow process and then states that whether or not claim 1 is infringed depends on whether the claim must be given a broad scope as contended for by appellee there (petitioner here) or whether the claim must be given only a narrow scope as urged by appellants there (respondents here).

Then Judge Stone goes on to show, by numerous quotations from the patent, that the patent discloses only a par-

ticular arrangement of the eggs in stage incubation including the shifting of the eggs successively downwardly from one position to another, and that the patent discloses only a movement of the air in columns through the egg trays and that the patent discloses only a movement of the air first to the eggs in the advanced stage of incubation and then to the eggs in the less advanced stage of incubation. He then summarizes on page 568 of the reported decision, his conclusions as to the meaning of claim 1, as follows (Italics ours):

> "From the above, it would seem that the arrangement, location, and change of location of the eggs at various stages of incubation was an essential feature of the disclosure. Nowhere is there a suggestion that the patentee has discovered that the desired results can be reached without or by some other arrangement, location or changes. Having disclosed this as an essential of his method with no hint, revelation, or teaching to the contrary the broad claim to arrangement of the eggs 'at different levels' cannot be extended to an arrangement of trays in a tier which alternates fresh and advanced eggs and where a tray is never moved from its position during the entire incubation period. The disclosure is limited to positions, in the egg column, of eggs in different 'stages' of incubation and the change or shift of such positions—the eggs in the 'early' stage of incubation are in one position where they remain a 'predetermined time' when they are shifted to another place in the column; from this second position, they are (after remaining a 'predetermined time') again shifted to a third position in the column.
>
> The arrangement of the air currents ('columns') is repeatedly stated to be such as to carry the heat given

off from the advanced eggs to those less advanced. When this is considered in connection with the above arrangement of eggs at various stages of incubation, it is difficult to see how the desired results can be secured except by a current of air passing first through the trays containing the most advanced eggs. That is the way appellee has devised his apparatus; it is the only way revealed by the patent or in practice; and it is successful.

Claim 1 (and, also, claim 2) must be so limited to preserve either of them. So limited, the question of infringement remains."

Then later, when discussing the infringement question, Judge Stone (p. 568) makes a further statement reading as follows:

"The conception and operation of appellee's device is a column of air passing through the column of eggs in a definite direction—from eggs in advanced stages to those less advanced."

In his conclusion, on the infringement question, Judge Stone states, page 568:

"Thus differing in both essentials of the patent—arrangement of eggs and air current—from the device disclosed by the patent, appellants' device is not infringing."

From the above it will be seen that the Circuit Court of Appeals for the Eighth Circuit, in the instant case, correctly held claim 1 of the patent limited to cover only a hatching method wherein eggs at different stages of incubation were held within a chamber and shifted successively from time to time as incubation progressed so as to group the eggs in the advanced stages and to group the eggs in the less advanced

stages and wherein there was a current movement of air to carry a column of air through a column of eggs in a definite direction from eggs in the advanced stages to those less advanced.

NOTE AS TO THE SMITH COMMERCIAL MACHINE:

The Smith commercial machine departs somewhat from the machine described in the Smith patent. In the commercial machine the double walled top of the machine described in the patent is done away with and the air moistening device is located directly in the compartment over the fans. Resulting difference in the action is that the fresh air admitted through the intake openings moves into this same chamber above the fans before it is moistened, and it is then moistened coincidently with the remoistening of that portion of the used air moving from above the egg trays and in that chamber commingled with the fresh air. This makes no difference as to the cycle or circuit of air movement, inasmuch as before any air is recirculated by the fan it is revitalized by quantities of fresh air and moisture, so that the air first striking the eggs in the advanced stages of incubation is vitalized air.

Also in the Smith commercial machine the upper stationary egg racks are done away with and the capacity of the tilting racks is correspondingly increased. The fabric strips closing the spaces between the lower ends of the tilting racks in the machine described in the patent are done away with, but the curtains are shortened in the commercial machine to a point just above the lower stationary hatching racks so that the velocity of air movement about and between the eggs in the most advanced stage of incubation remains about the same as in the machine described in the patent.

Authorities as to Interpretation of Patent Claims From the Specification of the Patent.

In resorting to the specification to determine the meaning of the terms used in the relied on claim 1 of the Smith patent here in suit, the Circuit Court of Appeals in this case did exactly what the long well settled law of the subject not only authorizes but required it to do.

Seymour vs. Osborne, 11 Wallace 516-547.

In this case, the Supreme Court, among other things, made the following statement, to-wit:

"Where the claim immediately follows the description of the invention, it may be construed in connection with the explanations contained in the specifications and where it contains words referring back to the specifications it cannot possibly be construed in any other way."

It should be noted that claim 1 of the Smith patent in suit terminates in the expression—*"for the purpose specified,"* thereby referring the claim back to the specification to be construed.

Mitchell vs. Tighlman, 19 Wallace 287.

This case involved the Tighlman patent 107,666 of Oct. 3, 1884, for a process, defined in the claim in the following words, to-wit:

"The manufacturing of fat acids and glycerine from fatty bodies by the action of water at a high temperature and pressure."

And the Court held that claim must be interpreted by reference to the specification, and construed the same to be so limited as to mean

"A process for decomposing fats and converting them into oleate margerate and stearate and a solution of glycerine by, among other measures, mixing the fat thoroughly with one-half or one-third as much water by means of a perforated piston forced through the mixture back and forth and by subjecting it for ten minutes to the temperature of from 510° to 600° Fahrenheit in a closed vessel capable of resisting the consequent pressure of 2,000 pounds and which is filled by the mixture and to which nothing else is admitted."

Westinghouse vs. Boyden Power Brake Co., 170 U. S. 537, 557-558.

In this case the Supreme Court applied the doctrine of *Seymour vs. Osborne.*

Expanded Metal Co., et al., vs. Board of Education of City of St. Louis, et al., C. C. A. 8th, Oct. 7, 1901, 111 F. R. 395.

This case was for the alleged infringement of the Golding patent No. 297,382, of April 22, 1884, for "Metallic Screening," and the Circuit Court of Appeals for the Eighth Circuit, in a decision written by the elder Sanborn, a high authority on patent law, affirmed the trial court in the dismissal of the bill of complaint for anticipation and non-infringement.

The claim of the patent read as follows, to-wit:

"As an article of manufacture, metallic screening formed of slashed and stretched metal, substantially as hereinbefore set forth."

In its said decision, the said C. C. A., among other things, made the following statements:

"The claim of the patent is expressly limited to a metallic screening formed of slashed and stretched metal, substantially as set forth in the specification. General language in a claim which points to an element or device *more fully described in the specification is limited to such an element or device as is there described,* and this claim *is limited to a screening slashed and stretched, substantially as set forth in the specification. Smith vs. Vulcanite Co.,* 93 U. S. 486, 493; *Adams Electric R. Co. vs. Lindell R. Co.,* 77 Fed. 432, 449, 23 C. C. A. 223, 240; and *Mitchell vs. Tighlman,* 19 Wallace 287, *supra.* The defendants manufactured a metallic screening without slashing and stretching it, substantially as set forth in the specification of appellant's pat-

ent and consequently they did not infringe the latter's monopoly."

O. H. Jewell Filter Co. vs. Jackson, C. C. A. 8th, Aug. 26, 1905, 140 F. R. 340. (Decision written by the elder Sanborn.)

This is a leading case on the subject here under consideration and contains a collection of authorities. The status of fact, however, is too complex for a brief statement. The following few remarks, however, will be sufficient to make clear the point of the decision.

The Jewell and Jewell patent No. 509,126, for improvements in apparatus for agitating the sand or filtering materials in a gravity filter was the one sued upon, and the relied upon claim called for a number of elements including

> "a finger bar pivotally mounted or attached to a carrying arm upon the agitator shaft (having certain special features set forth in the claim) adapted for stirring and loosening up the filter material * * * substantially as and for the purpose specified."

The said Court pointed out that the said expression "carrying arm," as used in that claim, must be interpreted in accordance with the description thereof given in the specification of the patent, and that, when so limited, the claim was differentiated from the defendant's machine.

Haggerty, et al., vs. Rawlings Mfg. Co., C. C. A. 8th, Sept. 25, 1926, 14 F. R. (2) 928-930.

In this case, the patent under consideration was for an athlete's guard, and the word "guard," as used in the relied upon claims, was, by reference to the specification, limited to the specific form of guard disclosed in the specification proper and illustrated in the drawings; and, after citing the

Supreme Court's decision in *McClain vs. Ortmayer,* 141 U. S. 419, and the *Jewell Filter Co. vs. Jackson, supra,* and others, said Court of Appeals affirmed the trial court in the dismissal of the bill of complaint, for non-infringement.

Rawson and Evans Co., et al., vs. Atlas Glass and Mirror Co., D. C. N. D., Ill., July 1, 1930, 42 F. R. (2) 241.

This is an extremely pertinent case. The status of fact was very similar to the status of fact in the case here at bar.

The suit was for the alleged infringement of the Andres patent, No. 1,281,262, of October 15, 1918, for improvement in *processes* of coating glass with precious metal; and a general term used in the relied upon claims was limited by reference to the specification and the bill dismissed for non-infringement. That general term was expressed in a clause which in the first claim of the patent read as follows:

"* * * a solution containing chloride of gold, potassium, carbonate and sugar diluted, as a substance effective to control or regulate the chemical reaction."

In the body of the decision, the Court identified some of the leading authorities on the interpretation of claims authorizing reference to the specifications, and then made the following statement:

"It is obvious therefore that the language of the claims 'a solution containing chloride of gold, potassium carbonate and sugar' can be read only in the light of the description and specification of Andres, wherein he specifically defines the diluted solution which plaintiffs now claim to be the basis of his invention. Thus to construe the language of the claims in the light of the specifications *defines* for us the gilding solution of Andres and *distinguishes it* from that of Pratt who speaks

of a diluted solution of chloride or gold, *caustic soda and glycerine.*"

Many more decisions from the U. S. Supreme Court and Circuit Courts of Appeal could be cited to the same effect, but the cases above identified are deemed abundantly sufficient.

SECTION 2. THE TRUE MEANING OF CLAIM 1 OF THE PATENT AS DETERMINED FROM THE PRIOR ART.

It follows inevitably, from a consideration of the prior art, that claim 1 of the Smith patent 1,262,860 must be given the same meaning as accorded thereto by the Circuit Court of Appeals for the Eighth Circuit in the instant case.

The Patentee Smith's Prior Public Usage.

The patentee, Samuel B. Smith, publicly and commercially used at Cleveland, Ohio, during the hatching seasons of 1913 and 1914 at dates more than two years before he filed his application for patent here in suit (October 26, 1916), an incubator of almost identical structure with that disclosed in his patent with the exception that the said prior use machine did not use the confining curtains of the patented machine and in the use of the said prior use machine it does not appear that the same specific type of stage incubation was used.

The proofs relating to this prior use machine, include said Smith's own testimony appearing (R. 134-139) and the two newspaper articles, stipulated photostats of which are in evidence, respectively, as "Defendants' Exhibit A" and "Defendants' Exhibit B." "Defendants' Exhibit A" is a photostat of page 5 of the Cleveland, Ohio, "Plain Dealer," issue

of Feb. 23, 1913 (R. 529-530), and the article is entitled "Mammoth Incubator Will Turn Out 20,000 Chicks Per Week." "Defendants' Exhibit B" is a photostat of page 5 of the Cleveland "Leader," issue of February 22, 1914 (R. 532), and the article is entitled "Cleveland Boasts Largest Hatchery."

Samuel B. Smith, at the trial of the case, was called as a hostile witness and cross examined as such. He testified (R. 134) that he built an incubator at Attica, Ohio, in 1912, and moved it to Cleveland, Ohio, and there commercially and publicly used it for hatching eggs throughout the years 1913 and 1914, that the chicks hatched were sold by him (R. 135) and that the percentage of hatch from that machine was from 40 to 45% (R. 138) of the eggs set. He described the machine (R. 134-135 and 137) as consisting of three large compartments or rooms about 9½ feet wide, about 12 feet long and about 10 feet high. He stated that there was one fan in the center of the ceiling of each compartment and that there was a corridor in each compartment with eight tiers of egg trays, fourteen trays high, at each side of the central corridor. The egg trays were so mounted on carriers that the carriers could be turned to turn the eggs. Heating pipes (R. 134) were on the floors of the compartment below the fans. The fans were driven at a speed of 1,750 revolutions per minute (R. 135) and the temperature of the air was kept at about 100° under thermostatic control (R. 135). There were no curtains in the corridor of this machine segregating the corridor from the egg trays (R. 136). He further stated that although each compartment of the incubator was filled with the same age eggs, the three different compartments were loaded with eggs at three different times succeeding each other in regular order. In other words, he stated that one compartment was first filled with eggs and, after

an interval of several days, another of the three compartments was filled with eggs and at a later date the third compartment was filled with eggs. As a result, the eggs in the different compartments hatched at different times. Although Dr. Smith denied that he used stage incubation in this machine and it is clear that he did not use the special type of stage incubation disclosed in his patent, it is equally clear that he had stage incubation of one form in that prior use machine. The eggs were set in stages in the different compartments of the machine and they were hatched in stages from the different compartments of the machine.

Mr. Smith stated (R. 135):

> "The air was driven down to the floor by the fan and came up around the eggs and led in between the columns of eggs. A small amount might go through the trays but a majority of it went up around between the columns."

From this statement, it is very clear that in that prior use machine the fan in the center of the ceiling of each compartment forced the air downwardly through the central corridor of the machine to the floor where the air took on heat from the heating pipes and then the air moved through and around the egg trays and circulated back to the fan. In other words, it is clear that except as modified by presence of the curtains in the machine of the patent and the interchange of fresh air for used air, the air circulation in the patented process is practically identical with the air circulation in the prior use machine. Of course, in the prior use machine the air was not made to circulate first to the eggs in the advanced stage of incubation and then to the eggs in the less advanced stage, both because curtains were not used and because the eggs in each compartment were all of the

same age and were not shifted and grouped with the cool eggs, *i. e.,* the eggs in the less advanced stage at the top of the egg tiers and the hot eggs, the eggs in the most advanced stage at the bottom of the egg tiers. However, the heat generated by the hatching eggs could not but have helped to supply the necessary heat to all the eggs, inasmuch as air was moved by the fans around and about all the eggs in each compartment. The trays of the eggs in the respective tiers in each compartment were spaced apart from each other in a vertical plane, and these spaces were open to the corridor. Of necessity, it follows that the heat generated by the hatching eggs got into the moving body of air and distributed heat to it.

That the said usage was a public and commercial usage was admitted by Dr. Smith (R. 135) in his answers to the following questions, to-wit:

"Q. How long did you commercially use that machine at Cleveland, Ohio, in that form that you have described?

A. Two years.

Q. Two years?

A. Yes.

Q. And you sold the hatches did you not?

A. Yes, sir.

Q. So that was for commercial use, was it not?

A. Yes, sir."

Then again on R. 137 Dr. Smith when testifying about the same machine, gave the following answers to the following questions, to-wit:

"Q. And did you succeed in hatching eggs?

A. Yes, sir.

Q. This machine as you then used it—I mean the one that you brought from Attica, and as you used it

there at Cleveland, Ohio, in 1913 and 1914, was open to the inspection of the public, was it not?

A. Yes, sir.

Q. You did invite people to come there?

A. Yes, sir.

Q. And, to your knowledge, were more or less newspaper articles, describing that machine, published in the daily papers of Cleveland, or some articles?

A. Yes, there were articles published."

Then the witness went on to identify the two newspaper articles, "Defendants' Exhibits A and B," and he stated that those articles referred to his machine that he used in Cleveland in 1913 and 1914 (R. 139). He stated that the articles in the newspapers were based on information that he no doubt had given the reporters. The said newspaper articles, "Defendants' Exhibits A and B," furnish a description of the machine that Dr. Smith used publicly and commercially at Cleveland, Ohio, for more than two years before he applied for his patent in suit (R. 529-532).

From a consideration of the above described old prior use Smith machine and its operation, it is obvious that there was in public use, more than two years before the filing of the application maturing into the patent in suit, an incubator wherein fans were used for forcing air to circulate through and about eggs in a multiplicity of tiered trays and wherein, at least part of the air once circulated was caused to recirculate again to the eggs. It is equally clear that in that prior use machine, Smith used a type of stage incubation although not the special type of stage incubation disclosed in his patent. It is, therefore, clear that Smith's own prior public use of his incubator at Cleveland, Ohio, during the years 1913 and 1914, preclude him from a valid interpreta-

tion of claim 1 of his patent which would make it cover the broad combination of forced draft and stage incubation.

Controlling Law as to Prior Public Use.

There can be no question whatever that, under the long well settled law of the subject, the testimony given by the plaintiff, Samuel B. Smith, himself, when on the stand as a hostile witness, with or without the corroboration afforded by the two newspaper articles, "Defendants' Exhibits A and B," conclusively establishes the prior public and commercial usage by Smith, at Cleveland, Ohio, of his above described machine to carry into effect his above described method of hatching eggs throughout the years 1913 and 1914. The testimony is conclusive not only beyond a reasonable doubt, but beyond even a shadow of a doubt. Said Smith's usage does not come within the exception stated by the U. S. Supreme Court in the *"City of Elizabeth vs. American Nicholson Pavement Co.,* 97 U. S. 126," but comes within the general rule set forth by this Court in the following cases:

Hall vs. Mac Neale, 107 U. S. 90;

Worley, et al., vs. Loker Tobacco Co., et al., 104 U. S. 340;

Smith & Griggs Mfg. Co. vs. Sprague, 123 U. S. 249;

International Crown Tooth Co. vs. Gaylord, 140 U. S. 55;

Root vs. Third Avenue Railroad Co., 146 U. S. 210.

Prior Patents and Other Publications.

The prior patents and publications make it clear that the patentee Smith was a late comer in a highly developed art and that if he did anything to warrant the issue of a patent to him, he did very little and at most the claim 1 of the

patent in suit is open to only a very narrow interpretation and to that interpretation accorded it in this case by the Circuit Court of Appeals for the Eighth Circuit.

The art of artificial incubation is a very old art dating, at least, from the time of the ancient Egyptians, where it was highly developed. More recent developments as shown by patents and publications make it clear that all the major problems of artificial incubation were recognized and met before Smith, the present patentee, appeared in the field.

Although numerous patents and publications were set up in the defendants' answer in this case, and many of them were introduced at the trial of the case and correctly described by defendants' expert witness, Professor Rowley, and his testimony in regard thereto has been for the most part incorporated in the record, only the most pertinent of these prior patents and publications will be here briefly described:

The Bonnemain Incubator.

This is disclosed in an article entitled "Incubation Artificial," appearing on pages 652 and 653 of "Ure's Dictionary, of Arts, Manufactures and Mines," published by Longmanns, Green & Co., London, England, in 1867 (R. 805-809). This article was never presented in any of the prior litigation under the Smith patent.

The said Bonnemain incubator as illustrated and described is adapted for large capacity. It consists of a large casing or chamber within which are located a tier of five superimposed vertically spaced egg containing trays. A hot water circulating pipe G running from a water boiler controlled by a heat regulator extends into the casing of the incubator above the highest tray and serpentines downward-

ly so that coils thereof are located between all the pairs of trays. There is a chick room or nursery directly adjacent one side of the main casing and the hot water pipe extends through this nursery in the form of a coil, and then extends back through the egg containing chamber through the lowest tray to the boiler R. Saucers N containing water supply the necessary humidity to the heated air within the casing, so that an atmosphere is created analogous to that under the body of the hen.

Special attention is called to the way in which the eggs were set and handled in the Bonnemain incubator. This is made clear in the following quotation taken from page 653 of the article (R. 809) (Italics ours):

> "When we wish to hatch eggs with this apparatus, the fire is to be kindled in the boiler, and as soon as the temperature has risen to above 100° F., the eggs are introduced; but only one-twentieth of the whole number intended, *upon the first day; next day a like number* is laid upon the trays, and *thus in succession for twenty days,* so that upon the twenty-first day the eggs first placed may be hatched for the most part and we may obtain daily afterwards an equal number of chicks."

Of course, it is obvious that, when the eggs are so set stage incubation within the same chamber is present. Moreover, inasmuch as it is said one-twentieth of the whole lot of eggs are set on successive days, it is also obvious that the successive settings must occupy *different places* in the incubator. Further, as only one tier of superimposed eggs is shown in the cut, it further follows that these different places must be at *different levels* within the casing of the incubator.

Obviously, the air circulation within the casing of the incubator is effected under the joint effect of heat and

gravity. Hence, from the stated way in which the eggs are set, it *necessarily* follows that the earlier settings of eggs, *i. e.,* the eggs in the more advanced stages will be developing more heat than the later settings of eggs, *i. e.,* the eggs in the less advanced stages; and therefore, heat from the eggs in the advanced stages of incubation will be transmitted through the air to the eggs in the earlier stages of incubation, not only by convection currents of the air but also by radiation.

Petitioner's brief writers, page 5 of their brief, attempt to make it appear that Smith was the first to hatch eggs in large quantities with tiered eggs set in stages in the same chamber and to stabilize the temperature of the eggs in the early stages of incubation and the temperature of the eggs in the later stages of incubation by utilizing the heat taken from the hot eggs to warm the cool eggs. Bonnemain successfully did this same thing before the French Revolution, as appears from the article in Ure's Dictionary.

The testimony in regard to the Bonnemain incubator appears in the record (R. 252-254) where the article itself is read into the record and the testimony of defendants' expert, Professor Rowley, relative to the said article, appears on pages 261 and 319 to 325 of the record. Although plaintiff's expert, Mr. Taggart (R. 406-407), attempts to show that the Bonnemain incubator was not adapted for successful commercial use in hatching eggs, he did not deny but that it could be used to hatch chicks.

The Winkler U. S. Patent, No. 286,756, Dated October 16, 1883, Entitled "Incubator" (R. 609).

This Winkler patent was repeatedly cited on the file wrapper record of the patent in suit. It discloses a large capacity incubator, wherein the eggs are so set and handled that stage incubation was present, and that the heat from the eggs in the advanced stage of incubation was carried to the eggs in the earlier stage of incubation. It is, therefore, a pertinent and material disclosure and must be understood. It discloses exactly the same kind of stage incubation as disclosed in the Smith patent in suit.

Part of the third paragraph of the specification, to-wit, lines 16 to 43, page 1, reads as follows:

> "The object I have in view in this invention is to overcome certain patent difficulties which attend the operation of machines now in use. A brief recital of these will serve to explain more clearly my object. During the progress of incubation the temperature must vary. At the beginning the eggs require a greater heat than at the close, because toward the end the embryo, having increased, furnishes a certain amount of heat for itself. For this reason the temperature produced by the apparatus should be gradually decreased during the process. This necessitates the complete charging of the incubator at the start. One lot of eggs cannot be introduced today and another in a week, because the temperature would be unsuitable for either one lot or the other. In large machines this immediate and large collection of eggs presents the difficulty of getting them fresh enough, or requires an outlay of money. My machine is so constructed as to allow the introduction of a fresh lot of eggs at short intervals, and gives to each lot its own

required temperature. This enables me to use successively perfectly fresh eggs without trouble, and makes the process continuous, which is a very desirable result in poultry-raising. Again, when all the eggs have reached an equal stage, and the young begin to come out, they are all crowded in the same apartment, or many are in several chambers. They hatch practically simultaneously, so that a great many are always wet. This necessitates the constant opening of the doors to remove them, which, by lowering the temperature, affects injuriously the other eggs; or, if allowed to remain, the young, in struggling about while still wet, smear the unhatched eggs and prevent their hatching; or they injure themselves on the broken shells or in the interstices between the eggs. My machine hatches them in small batches removed from the unhatched eggs, so that the temperature is not lowered by removing them, nor are they injured, nor do they injure the other eggs. Again, the ordinary machines are not adapted for all kinds of eggs (goose, turkey, duck, and chicken eggs placed therein promiscuously), because these having different periods of incubation, the periods of temperature for one kind will not answer for another. My machine provides for this, so that I am enabled to place all kinds of eggs and give to each its required period and temperature. These are some of the difficulties which I overcome."

The essential features of this Winkler incubator and its mode of operation may be correctly stated as follows:

The illustrated incubator includes a large rectangular casing, wherein the incubation of the eggs takes place, and a shallow lateral extension which receives the hatching eggs. Mounted in the main casing, is an endless conveyor of the

chain and slat type, which extends downwardly from the top of the casing in successive undulations over suitably spaced drums, or rollers, to the bottom of the casing, at which point the hatching eggs are delivered to the top of a horizontal belt located in the bottom of the lateral extension where the hatching is completed.

The said chain and slat conveyor then runs idle from the bottom to the top of the front wall of the main casing, as best shown in Figs. 1 and 2 of the drawings. Below the working runs or undulations of said conveyor and directly adjacent thereto, are stationary floor screens, the ends of which curve upwardly adjacent the rotary drums to guide the eggs moving downwardly with the moving conveyor. One end wall of the casing is provided with two horizontal doors marked, respectively, d and d^1, one near the top of the casing and the other at the lower end of that wall, and in the opposite end wall of the casing is another similar horizontal door marked d^2. One or the other of these three doors may be opened for permitting eggs to be placed on the said traveling conveyor. The choice will depend on whether or not the eggs are chicken eggs, duck and turkey eggs, or goose eggs, as these respective kinds vary in the number of days required for hatching. When chicken eggs are used, they are placed on the conveyor through the door marked d^2.

Said slat and chain conveyor is moved intermittently by a clockwork driving mechanism and this intermittent movement is properly timed. The eggs are turned by the travel of the conveyor. The eggs are set at different times and hatch at different times.

In the specification (lines 53-73, page 2 thereof) appears the following statement:

> "Knowing the times at which the conveyor is advanced its set distance, I am ready with a fresh lot of

eggs to put through the doors into the slats which are within reach. At the next time, these eggs have been carried forward and empty slats presented, into which I put another lot, and so on. In this way I put in, *at short intervals,* a limited number. The eggs being discharged below, the slats ascend empty, and the operation is continuous. The turning of the eggs is entirely automatic, for the reason that they rest on a stationary downwardly inclined floor, and are advanced by the traveling slats, between which they lie. They thus *roll,* and the distance which the conveyor advances at one time is regulated to turn them a quarter or a half turn, as the case may be. The curved ends of the floor sections D receive the eggs as they come around the drums. When they reach the bottom the chicks will have picked the shells, and the eggs must not thereafter be turned."

In the paragraph of the specification, beginning in line 92 on page 2, it is stated how heat and moisture are supplied to the eggs in the incubating chamber or interior of the main casing of the machine. Water jackets G are located in the casing and the sections thereof are of such construction that they overlie all the folds of the conveyor, but are independent of each other and so suspended that they may be independently raised or lowered to vary the space between the same and the eggs. The ends of the sections of said water jackets G are connected with each other by two flexible pipes h, one of which joins the bottoms of the jackets and the other the tops thereof, whereby the free circulation of the water is permitted. Under the main casing of the machine, are located coal stoves H having boilers I; and from the tops of these boilers extend flexible pipes i to the upper portion of the lower end of the lower section of said water jackets G.

Then flexible pipes i^1 join the bottom of the boilers with the lower portion of the lowest water jacket G. This is the way in which the heat is supplied to the incubating chamber.

Water containing pans K, located some on the floor of the incubating chamber and some between the so-called undulations or folds of the traveling conveyor, supply the requisite moisture to the heated air within said chamber.

The side walls of the incubating chamber are provided with a series of small holes k, so arranged that some thereof are directly under every undulation or fold of the egg conveyor, as clearly shown in Fig. 4 of the drawings, and the top wall of the incubator casing is provided with restricted air outlets, best shown in Fig. 1 of the drawings.

The clockwork mechanism by which the egg conveyor is intermittently advanced under step by step motion, is described in lines 38-66 on page 3 of the specification; but it is not thought necessary to detail the same here.

From the stated way in which the eggs are set and handled in this machine, it is perfectly obvious that stage incubation is present and that the eggs at different stages of incubation are so located that heat developed by the eggs in the advanced stages of incubation will be delivered to the eggs in the earlier stages of incubation. It is also obvious that there is present in the closed chamber of the incubator a plurality of eggs arranged at different levels and that this closed chamber has numerous inlets for fresh air in its sides and restricted openings in its top for the escape of foul air without undue loss of moisture. The air is constantly being moistened. The air is circulated under the action of heat and gravity and the supply of moistened fresh air substituted for the discharged foul air, keeps the body of air within the incubating chamber constantly vitalized.

The Winkler patent was briefly considered by Professor

Rowley, under direct examination, and his testimony then given appears on pages 263 and 264 of the printed record, which is substantially correct as far as it goes, with the exception of the incorrect usage of some of the reference letters, but is not complete enough for the full understanding of the Winkler disclosure.

Professor Rowley was shortly cross examined on this patent by plaintiff's counsel, Mr. Ely, and his testimony then given appears on pages 318-319 and on page 325 of the printed record; and by reference thereto, it will be seen that this cross examination did not cause Professor Rowley to make any change in the testimony given by him on direct. It simply brought out some more details of the disclosure.

Plaintiff's expert, Mr. Taggart, when on the stand in rebuttal, made a brief reference to this Winkler patent and what he then said appears at the head of page 407 of the record. The first sentence of which reads as follows:

"The Winkler patent describes stage incubation."

Especial attention is called to this adverse admission made by plaintiff's expert, as it admits the identical thing for which the Winkler patent was cited on the file wrapper record and the identical thing for which it was identified in the defendants' answer and introduced into evidence at the trial of the case.

What said Taggart there says in the additional sentences to the effect that, in his opinion, the Winkler patent is inoperative to hatch eggs, is not corroborated or substantiated in any way, and is directly in the teeth of the disclosure made in the Winkler patent. It is simply one of the numerous instances on the record, wherein this self interested witness expressed opinions showing on their face that his wish was the father of his thought.

The Stulik German Patent, No. 155,917, Dated November 7, 1901, and Entitled "Incubating Process and Device For Group Charging and Simultaneous Treatment of the Groups of Eggs Inserted at Different Times Into the Incubating Apparatus."

A photostatic copy of this patent is bound into the record on pages 729-733, inclusive, and a certified official English translation thereof is bound into the printed record at pages 733-743, inclusive. This patent was cited as a reference by the Patent Office during the prosecution of the application maturing into the Smith patent in suit.

Briefly stated, the German patent to Stulik disclosed an incubator wherein the eggs were set in stages and were hatched in stages, the eggs in different stages being all set in the same chamber and wherein, therefore, stage incubation was present. The stage incubation used by Stulik was somewhat different than the stage incubation of the Smith patent in suit for the reason that the air moved by convection straight through the machine from the eggs in the less advanced stage of incubation to those of the eggs in the most advanced stage of incubation. Although the eggs in the less advanced stages derived heat from the eggs in the most advanced stages to some extent by radiation, very little heat was carried from the eggs in the more advanced stages to the eggs in the less advanced stages through air movement.

The Zimmer U. S. Patent, No. 1,075,747, Dated October 14, 1913, Entitled "Semi-Fireless Incubator" (R. 795-803).

This patent was not cited in the file-wrapper record of the Smith patent in suit. It was considered by defendants' expert, Professor Rowley, under direct examination (R. 267 to 270) and under cross examination (R. 313 to 318).

The Zimmer patent discloses an incubator and hatching method wherein the eggs were set in stage incubation within the same chamber and wherein the heat of the hatching eggs in the later stages of incubation were utilized to supply the necessary heat to the cool eggs in the earlier stages of incubation. The heat was transferred from eggs of one stage to eggs of another stage by convection movement of the air and by radiation. The particular type of stage incubation disclosed in the Zimmer patent is somewhat different than the particular type of stage incubation disclosed in the Smith patent in suit.

Partial Conclusion as to Stage Incubation.

In view of the disclosures made in the above considered article, taken from Ure's Dictionary of Arts, Manufactures and Mines, published in 1867, the disclosure made in the *Winkler* patent, the disclosure made in the Stulik patent, and the disclosure made in the Zimmer patent, it is perfectly obvious that Samuel B. Smith, the patentee of the patent here in suit, did not originate stage incubation. The said article in Ure's Dictionary disclosed stage incubation over fifty-eight years before Smith used it. Winkler disclosed it in his patent of October 16, 1883, above considered, or at a date over thirty-two years before Smith appeared; and Stulik disclosed it in his German patent 155,917, of November 7, 1901, at a date over fourteen years before Smith appeared in this field, and in the introductive part of his specification, Stulik made it clear that at least two forms of stage incubation had been in commercial use before he made his improvement thereon disclosed in his said patent.

The Winkler patent disclosed the same identical form of stage incubation that is disclosed in the specification of the

Smith patent in suit, including the shifting of the said eggs at intervals, from higher to lower levels, and thereby got the eggs so disposed relative to each other within the casing that the heat generated by the eggs in the advanced stages of incubation was transmitted to the eggs in the earlier stages of incubation.

As has been before brought out in this brief, Smith, himself, used a form of stage incubation in the method of hatching eggs publicly and commercially practiced by him in Cleveland, Ohio, during the years 1913 and 1914, more than two years before he filed his application maturing into the patent in suit. The stage incubation used by Dr. Smith at that early date, however, was not the particular type of stage incubation disclosed in the patent and to which claim 1 of the patent is limited for the reason that in his prior art machine the eggs of different ages were not all set in the same chamber and were not successively shifted in position from higher to lower levels, so as to cause the heat to pass from the eggs in the more advanced stages to those in the less advanced stages, as required by claim 1 of the patent.

The Guerin U. S. Patent, No. 3,019, Dated March 30, 1843, Entitled, "Egg Hatching Apparatus" (R. 745).

This patent was identified and briefly explained by Professor Rowley (R. 261-263), and he was shortly cross examined regarding same on page 331 of the record. It was not cited during the prosecution of the Smith application.

This is a very early incubator patent and discloses a large capacity incubator, wherein the eggs are placed and held in tiers of superimposed trays, arranged along one or more sides of a large building. In the drawings, three trays are shown in each tier. There was space below the tiers or trays used as

a nursery for the hatched chicks. Heat was supplied by steam from a boiler. The pipes extended around all sides of the building near the floor thereof below the trays of eggs. The furnace for the boiler had a comparatively high stack. The room had large fresh air inlets L located directly below the tiers of trays. Water was supplied to the air from a water trough extending entirely across the floor of the room. Reliance was placed upon gravity and the heat to circulate the air. The outlets for the used air are not specified but probably were through the doors or other openings in the building.

This patent was introduced simply to show how early large capacity incubators had been disclosed in this art, wherein the eggs were held in many tiers of many superimposed trays, and wherein the circulated air was heated and moistened, and kept vitalized by a constant admission of fresh air.

The Bassini and Heyden U. S. Patent, No. 330,457, Dated November 17, 1885, Entitled, "Incubator" (R. 623-629).

Professor Rowley briefly considered this Bassini and Heyden patent, under direct examination (R. 270-271), and under cross examination (R. 329-331). This patent was cited in the file-wrapper record of the Smith patent in suit.

This Bassini and Heyden patent illustrates and describes an incubator having a rectangular casing, the interior of which contains, adjacent to its side walls, two tiers of superimposed egg-containing trays, with the two tiers so spaced apart as to afford a central corridor between the tiers of trays, but in communication therewith. The interior of the incubator is heated by hot water from an exterior boiler B through coils of circulating pipes e disposed within the in-

cubator so as to afford a complete circuit for the water flowing from the top of the boiler back to the bottom of the same. The trays have bottoms composed of spaced bars of frames slidably mounted within the incubator, so that by sliding these frames the eggs can be turned. Fresh air is admitted to the interior of the casing through opening a, controlled by a pivoted lid (see Fig. 1) and the foul or used air is let out through a hole or opening in the top wall of the incubator covered by a damper j and subject to thermostatic control, which includes an electric solenoid magnet having the free end of its armature connected to said damper, and which solenoid is located in an electric circuit from a battery controlled by a mercural thermometer located in the central corridor of the incubating chamber, as best shown in Figs. 1, 2 and 3. In the incubator are located pans g underneath the lowermost egg-containing trays and through which pans the tubes of the lower coil of the water circulating pipes pass, as shown in Fig. 2, and it is said that this will produce evaporation from said pans and thus supply the needed moisture. The air circulates under the joint effect of heat and gravity, and under the thermostatic control, it is obvious that the used or foul air will be let out and be substituted by fresh air, so as to keep the temperature uniform and vitalizing fresh air present in the incubating chamber.

The Van Keuren U. S. Patent, No. 1,160,793, Dated November 16, 1915, Entitled, "Incubator," and Granted on an Application Filed June 12, 1915 (R. 719-727).

This patent was considered briefly by Professor Rowley (R. 273-274), under direct examination. Professor Rowley was not cross examined respective to this patent.

This patent was repeatedly cited as a reference on the file wrapper record of the Smith patent here in suit, and no attempt was made by Smith to carry his invention back beyond the filing date of Van Keuren's application. Hence, under the settled law of the subject, the disclosure of this Van Keuren patent must be treated as part of the prior art in respect to Smith.

The disclosure of this Van Keuren patent is material and of controlling weight in respect to some of the features involved in the machine of the Smith patent and the mode of operation thereof.

The Van Keuren patent discloses an incubator of considerable capacity. Its casing is of rectangular form in cross section and, by suitably placed partitions, the interior thereof is divided off into two side compartments and a central corridor. In the side compartments are located tiers of superimposed egg-containing trays. The side walls of the corridor are afforded by the vertically disposed partition plates or corridor walls 7 which terminate near the bottom of the casing, but slightly above the same so as to afford openings 8 extending from the corridor into the side compartments of the casing below the tiers of eggs. The top of the corridor is closed by a top plate 9 extending to the vertical side plates 7 of the corridor. To the said top plate 9 of the corridor is fixed a horizontal deflecting plate 10.

Underneath the casing is located a moistening tray 32 slidably mounted in a box 33, which box has a series of openings or slots 35 in its top, which afford communication with the lower part of the corridor and the side compartments of the incubator.

A heater, of the shape shown in Fig. 6, has a laterally extended circulating flue 22, which, when the parts are in working position, takes the position shown in Fig. 5 of the draw-

ings, so that the circulating coil and its guard plates 27 are entirely within the corridor of the casing and the shell of the heater is outside of the casing. The outlets for the products of combustion are afforded by the stack 20 and its hood having exit openings in its side walls above the stack 20. The radiator coil 18 and its guard plates 27 do not fill the space within the central corridor as can be clearly seen on reference to Figs. 2, 4 and 5.

Fresh air is available to this space of the corridor through the slots in the opening of the box 33 holding the open tops of the moistening tray 32 and the slot 37 in the bottom wall of said corridor. This fresh air is then heated in the corridor of the said radiating coil 18 and, under the action of the heat, will rise, but as it cannot get out at the top of the corridor, it comes back down along the inner surfaces of the side walls 7 of that corridor, until it reaches the lower edges of the same or openings therein, which permit it to pass laterally into the spaces 8 below the lowermost of the egg-containing trays in the side compartments. Thence, the heated air travels upward through the tiers of superimposed trays to the top of the incubator, where a large part of the up-moving currents of air will strike the under side of the horizontal deflector 10 and be forced to travel around the outer edges of said deflector, before it can reach the air outlets afforded by the ventilator 38, which extends the whole length of the incubator on the top of the casing thereof.

The egg-containing trays are stated to have bottoms made up of wire screen cloth and the perforations or meshes thereof show in Fig. 2 of the drawings.

The circulation of the air is effected under the effect of heat and gravity. Fresh air is constantly coming in and used air constantly going out and the incoming air is moistened to afford the requisite amount of oxygen and water to

the eggs. The carbon dioxide emitted by the eggs is carried out with the discharged air. In other words, the air being used within the incubator is kept vitalized all the time.

Obviously, this Van Keuren patent makes a clear disclosure of a practicable incubator from which disclosure Smith could have taken and probably did take some of the principal conceptions embodied in the machine of the Smith patent and in its mode of operation. The two casings are practically identical and are sub-divided by partitions in the same way so as to afford a central corridor and two side compartments. In both the air is heated in the corridor, and by the partitions forming the corridor walls it is forced to travel first down through the corridor to points below the lower edges of the corridor walls and then to travel laterally under the tiers of eggs and up through and about the eggs in the trays. So far as air circulation is concerned, there is no material difference between the air circulation of the Smith patent and the air circulation of Van Keuren, with the exception that in the Smith patent there are propelling fans near the top of the corridor while in Van Keuren there are no fans, Van Keuren relying on heat and gravity to effect the circulation of the air. Also in the Smith patent, part of the used air in the incubator is revitalized and recirculated in a new cycle of air movement, while in the Van Keuren patent this is not the case.

The Bell U. S. Patent, No. 691,837, Dated January 28, 1902, Entitled, "Incubator" (R. 655-661).

This Bell patent was repeatedly cited on the file-wrapper record of the Smith patent in suit and was briefly considered by Professor Rowley under direct examination (R. 272). Rowley was not cross examined in respect to the Bell pat-

ent. The Bell patent discloses a large house-like casing within one side of the chamber of which are located three tiers of superimposed egg trays, nine trays to a tier. The chamber forms a corridor at the opposite side thereof from the egg trays. Obviously, the incubator is of great capacity. Below the tiers of trays is located a suitable heater for maintaining the proper temperature in the chamber and water containing pans for moistening the air. Access to the corridor is afforded by a door.

Fresh air is supplied through inlet pipes numbered 14 in the drawings extending through the side walls of the chamber of the incubator. An outlet for the used air is mounted in the top wall of the chamber of the incubator and the flow of air through this outlet is controlled by a thermostatically operated damper, the thermostat of which is operated by the temperature of the air within the chamber of the incubator. The air outlet lets the used air into the garret, under the sloping roof of the room, and it is stated that the sloping sections of the roof are "provided with sufficient cracks to permit the hot air to escape from this upper chamber, which thereby partially confines the escaping hot air, causing the same to escape slowly and preventing the lower egg receiving compartment from becoming suddenly chilled" (Bell patent, page 2, lines 1 to 6).

The Bell patent obviously discloses a practicable incubator of large capacity affording all the necessary conditions for the successful hatching of eggs. Attention is called to the fact that, while the manner of setting the eggs is not stated in the specification it is obvious that the eggs can be readily set in the stage incubation in the Bell machine after the manner of Bonnemain, or any other desired type of stage incubation can be used in the Bell machine.

The Koons U. S. Patent, No. 916,454, Dated March 30, 1909, Entitled, "Incubator" (R. 689-704).

This Koons patent was cited on the file-wrapper record of the Smith patent in suit. It was considered by Professor Rowley under direct examination (R. 274-276). Rowley was not cross examined in regard to this patent.

It is sufficient to state in regard to this Koons patent that it discloses an operative incubator consisting of a closed chamber within which the eggs are stacked in tiered racks and to which heat is supplied by a thermostatically controlled heater having a stack. A fresh air inlet is provided in the lower part of the chamber and this fresh air flows up and around the various egg trays. Air outlet openings running from the chamber to the stack of the heater are provided and these air outlet openings create a *forced draft* through the chamber of the incubator. This forced draft is created on the ejector principle in the same manner as is the forced draft through the boiler flues of a locomotive. In other words, the forced draft is produced by suction created by the pull of the air going out of the chimney or stack of the heater.

Koons, therefore, discloses an incubator and a hatching process wherein forced air current is "created by means other than variations in temperature." He emphasizes this forced draft air circulation and his patent contains claims to his means of producing the same.

Comment As to Patents and Publications Taken From Arts Analogous to the Incubating Art.

There were introduced into evidence, at the trial of this case, a number of patents and prior publications relating to

arts differently named from but analogous to the incubating art. These patents and publications are considered pertinent for the reason that in these other arts as well as in the incubator art, the problems and solutions to these problems were the same. The material acted on was, of course, different. In the incubating art the material acted upon was eggs. In these other arts, the material acted on was in some cases, tobacco, and in some cases macaroni and like products. As in the incubator art, whether the machines and processes described therein were utilized for curing tobacco, or for drying macaroni or for other like purposes, temperature control, moisture control and fresh air control, with economy and simplicity were the desideratums. It is, therefore, proper for this Court to consider these patents in the said related arts.

There were also introduced into evidence at the trial of this case several patents and publications relating to the household ventilating art. These patents and publications are pertinent as Judge Hickenlooper pointed out, in the District Court case, on this same patent, entitled *Buckeye Incubator Co., et al., vs. Petersime, et al., unreported.* The problems in household heating and ventilation are identically the same as those under consideration in artificial incubation. The temperature in the space being heated and ventilated must be maintained such as to permit persons to live comfortably, in the same manner as the temperature in an incubator must be maintained properly to promote the development and life of the chicks in embryo.

The proper amount of moisture must be maintained in the air in which persons live to promote healthy conditions in the same manner as the proper amount of moisture must be supplied to the incubating chambers within which eggs are hatching. The proper amount of fresh air must be admitted

and the proper amount of used air must be discharged from the rooms wherein human beings live to promote healthy conditions in the same manner that the proper quantities of fresh air and the proper quantities of used air are respectively admitted to and discharged from the chambers within which chicks are being hatched.

That the Courts have considered the art of incubation to be analogous to the art of heating and ventilating is shown by the decision of the Circuit Court of Appeals for the Second Circuit in the case entitled *"Jones v. Cyphers,"* decided Nov. 24, 1903, and reported in 126 F. R. 753. This was a suit for the alleged infringement of certain claims of the Jones patent No. 586,088 dated July 6, 1897, for "Improvements in Incubators and Brooders" and these claims were held invalid for lack of patentable invention over the disclosures made in the prior patent to Schulze No. 101,168 of March 22, 1870, for a "System of Heating and Ventilating" and the prior patent to Vanderheyden No. 504,544 of Sept. 5, 1893, for a "Sanitary House." It was urged in that case by the plaintiff-appellant that these prior patents were not in an analogous art but to this the Court replied as follows:

> "Whether houses and incubators are or are not in the same class is unimportant. The patent in suit deals with the problem of ventilating an incubator; the two earlier patents with the problem of ventilating a house or a room; and we are clearly of the opinion that the devising of systems of ventilation belongs to a single art, whether such systems are to be applied to a hospital, a sewer, a ship's hold, a cold storage box, an *incubator* or any other structure where circulation of air is sought to be secured."

The Proctor and Knowles U. S. Patent No. 426,321, Dated April 20, 1890, Entitled "Drying Machine" (R. 765-771).

This patent was not cited during the prosecution of the Smith application in the Patent Office. It was considered at the trial of the case by Professor Rowley under direct examination (R. 277 and 278). There was no cross examination of Rowley relative to this patent.

Although various forms of the machine of the patent were illustrated and their operation described, attention is called particularly to that form shown in Fig. 8 of the drawings, inasmuch as the machine there illustrated is very similar in construction, and in operation to the incubator of the Smith patent in suit. Double rooms were shown in Fig. 8 of the drawings but it is only necessary to consider one of these rooms.

The Proctor and Knowles machine shown in Fig. 8 consists of a large rectangular casing or "room" corresponding in size to the incubator of the patent. This room is divided near its top by a horizontal false ceiling to form an upper gallery and a lower chamber within which the material to be operated upon is held. The outer portions of this false ceiling B are perforated. A so-called funnel G or cowl projects downwardly from the central portion of the false ceiling B and acts as a confining and directing skirt for air streams blown downwardly by a fan C mounted in a central aperture in the false ceiling B. The fan C draws its air from the gallery of the machine, some fresh air being admitted to the gallery in much the same manner as the Smith patent through a door H (air inlet). Used air is allowed to escape from the casing through a door I (air outlet) and thence to a stack J. Steam coils F, furnishing heat to the room, are arranged about the upper portions of the sides of the cowl

G immediately below the false ceiling B.

In operation, the fan C draws air from the gallery above the same, part of this air being fresh air admitted through the inlet door H and part of it being used air drawn through the perforations in the false ceiling B to the gallery after it has been first circulated to the chamber within which the goods being treated are held. The fan C forces the air downwardly through the cowl G in columnar form, this cowl confining the air and directing it in much the same manner as do the curtains in the corridor of the Smith incubator. The air moves downwardly through the center of the chamber in the Proctor and Knowles machine and then it mushrooms out as shown by the arrows in Fig. 8 and moves upwardly, chiefly in columnar form, part of the air being exhausted through the air outlet door I and part of it passing back to the gallery where it is again recirculated in the next cycle of movement in the machine.

Although the patent does not state that moisture is supplied to the air, it is obvious that this might be done by any mechanic skilled in the art if the Proctor and Knowles machine were to be used as an incubator, for example, as shown in numerous incubator patents, some of which have already been called to the attention of this Court. It is also obvious that eggs could be set in stage incubation in this Proctor and Knowles machine after the manner of Bonnemain or after the manner of Winkler without requiring invention. In other words this Proctor and Knowles machine could, with ordinary common sense, have been used as an incubator by any one conversant with the incubator art long before Smith ever applied for his patent and when so used the method of hatching carried out therein would have been practically identical with that disclosed in the Smith patent.

The specification of the Proctor and Knowles patent shows

on its face that the machine was not intended to be confined to any particular specific usage, but was intended to be used in all kinds of drying machines.

The Goldstein U. S. Patent, No. 1,137,752, Dated May 4, 1915, Entitled, "Apparatus For Curing or Artificially Aging Cigars," Granted On An Application Filed June 20, 1914 (R. 715-719).

This Goldstein patent was repeatedly cited on the file-wrapper record of the Smith patent in suit. Professor Rowley's testimony under direct examination appears (R. 282-283). He was not cross examined in regard to this patent.

Briefly stated, the Goldstein machine was designed for curing or artificially aging cigars. This machine includes a large outer casing and an inner casing having one end wall and two side walls common with the outer casing. The other end wall of the inner casing is spaced from the other end wall of the outer casing to form a corridor within which is located near the bottom a hot water heating coil 11, near the middle a motor driven fan 12 and near the top a humidostatically controlled humidifier 13 consisting of a tank within which water is held and electrical heating elements disposed for heating and evaporating the water therein. The top wall of the inner casing is spaced below the top wall of the outer casing, while similarly the bottom wall of the inner casing is spaced above the bottom wall of the outer casing to form air circulation passages 9 communicating with the corridor. The top and bottom walls of the inner casing are apertured to permit the travel of air therethrough. A hot water boiler supplies the hot water to the heating coil 11 and a thermostatically controlled mechanism maintains the temperature within the inner and outer casing uniform at all times. The

inner casing is provided with a door through which access may be had to the same for the insertion and withdrawal of the goods to be treated.

The fan 12 located in the corridor draws air upwardly from about the heating coil 11 and forces the same over the humidifier 13 where moisture is imparted to the air, whereupon the air travels laterally through the upper passage 9 and then moves downwardly through the openings in the top of the inner casing into the inner casing to treat the goods contained therein, whereupon the air passes downwardly through the openings in the bottom of the inner casing into the lower passage 9 and runs laterally through this passage back into the corridor to the heating coil 11 and recycles. By providing air inlet and outlet openings in this machine, which could be done by anybody familiar with the incubation art, as it existed at the date of said patent, the machine could be used for hatching eggs. The air circulation is quite similar to the air circulation in the Smith machine with the exception that the air travels in different directions, through the corridor and through the material treated in the Goldstein machine, than does the air in the Smith machine.

The Schmidt & Schutterle U. S. Patent, No. 1,010,809, Dated Dec. 5, 1911, Entitled "Apparatus for Drying Macaroni and Like Bakery Products" (R. 783-794).

This Schmidt and Schutterle patent was not cited on the file-wrapper record of the Smith patent in suit. It was considered under direct examination by Professor Rowley (R. 280-282) and under cross examination (R. 332).

Upon inspection of Fig. 1 of the drawings, of this patent, it will be seen that there is disclosed a large casing which looks almost exactly like the Smith incubator with the excep-

tion that the Schmidt and Schutterle machine has two doors at its front while the Smith machine has only one door.

From the drawings and description, it will be seen that the interior of the casing is partitioned by a vertical transverse wall W having a large screened opening therein to afford a corridor at the rear end of the machine wherein there is placed heating coils E and an air moistening or humidifying device (steam spray 15). Mounted within the opening of the wall W within this corridor there is mounted a long bladed fan B mounted to turn on a horizontal axis. Forward of the wall W is located the compartment within which trucks or carriages for carrying the material to be treated are located. These trucks or carriages are of two types and one of the types illustrated is in the form of a rack carrying mesh bottomed trays. There is also a ceiling horizontally disposed directly above the corridor and tray containing compartment but stopping short of the front end of the latter. This ceiling is so placed as to afford a gallery within the casing above the same, which gallery is in communication at its front end with the tray containing compartment and it is in communication at its rear end with the corridor. Where the ceiling 10 projects over the corridor it is provided with a hinged door 12, shown best in Fig. 2 of the drawings, which door through suitable mechanism can be raised and held in raised condition. A fresh air inlet door 7, shown in Figs. 2, 3 and 4, is provided in the rear wall of the machine to admit fresh air to the corridor while used air outlet doors 9, shown clearly in Fig. 1 as well as on the other views, are provided in the top of the machine.

When the machine is in operation with the door 12 over the corridor in the raised dotted line position shown in Fig. 2, and with the air inlet door 7 opened and with one or both of the outlet doors 9 opened, the action of the machine is as

follows: The fan B will draw air from the corridor and force this air chiefly in horizontal direction through the material stored in the racks of the trucks in the tray-containing compartment. Part of the air drawn into the fan B will be fresh air admitted to the corridor through the air inlet door 7, while part of the same will be air drawn from the gallery into the corridor, *i. e.*, air that has at least once been recirculated through the machine. The fresh air mixes with the used air in the corridor and the composite body of fresh and used air is heated by the heating coils E and moistened by the steam admitted from the moistening device 15. It is, therefore, air vitalized by moisture and fresh air and tempered by the heating coils that is passed through the material held within the racks in the tray-containing compartment. The air moves through and about the various trays in the racks and then passes to the front of the tray compartment where it moves upwardly to the overhead gallery above the ceiling 10. The air then travels in the gallery toward the rear of the machine, some of the used air being discharged to atmosphere through the air outlet doors 9 and the remainder of the air being drawn into the corridor to be reconditioned by moisture, heat and fresh air preparatory to the next cycle of movement.

Although the patentees stated that the machine was designed especially for drying macaroni, they further stated, page 1, lines 25 to 28 of the patent, that the apparatus was not necessarily limited to this single use or product. It is obvious that this machine without any change whatsoever is capable of use for the successful hatching of eggs. Professor Rowley so stated in his testimony. He further brought out the fact that this machine in its operation incorporated all features necessary for the successful hatching of eggs. Part of his testimony in this respect (R. 281-282) and certain

questions put to him relative to this machine read as follows:

"* * * Now, in this apparatus, we have an apparatus which has got all the elements of an incubator. We have got a chamber and heating control; we have got humidity; we have got new air supply and old air provided for; we have got in the compartment racks or trays which could be used for egg trays, or a space which could be provided with suitable egg trays. If, in that space, suitable egg trays were provided, this machine has all the elements for hatching, just the same as in the other incubators. We have got temperature, humidity and air circulation and new air—the requirement would be suitable egg trays. * * *

* * * Q. Now state whether or not, in your opinion, the machine disclosed in that patent that you have just been discussing, to-wit, the Schmidt and Schutterle patent 1,010,809, of Dec. 5, 1911, could be used just as it is there disclosed, for hatching eggs? * * *

* * * Q. Go ahead.

A. Yes.

Q. You said you can?

A. I answered your question 'Yes!'"

Eggs could be set in this machine by any one conversant with the incubator art in precisely the same way that they were in the Bonnemain incubator disclosed in the article taken from "Ure's Dictionary" and when so set staged incubation would have been present together with a fan-produced forced draft so that a method of hatching would have been carried out corresponding to the method that petitioners allege claim 1 of the patent in suit is broad enough to dominate.

The Peters and Hungerford U. S. Patent No. 843,909, Dated Feb. 17, 1907, Entitled "Atmosphere Regulating System" (R. 773-778).

This Peters and Hungerford patent was not cited on the file-wrapper record of the Smith patent in suit. It was considered by Professor Rowley under direct examination (R. 286-288) and his testimony shows that in the heated and ventilated room illustrated in the drawings, all the conditions essential for the incubation of eggs therein are present, and (R. 288) Professor Rowley states that this identical apparatus could, in his judgment, be used successfully as an incubator. He also states that the Peters and Hungerford disclosure of heating a room and ventilating and air conditioning the same is common practice according to his own experience. Professor Rowley was not cross examined in respect to the patent.

By reference to the drawing and specification of the Peters and Hungerford patent, it will be seen that there is provided a room to which conditioned air is forced by a blower. From the blower 16 the air may be made to pass to either a cooler or a heater or through both by means of by-passes, one of which is under thermostatic control from the room, and the other of which is under humidostatic control from the room. After the air is heated or cooled it passes to an air moistening device 48 under humidostatic control from the room to permit the air to take on the proper humidity. The air is admitted to the room from a trunk conduit and is drawn off from the room by means of the blower. As much air as desired taken from the room may be recirculated or it is possible to mix this used air with any desired quantity of fresh air or to circulate fresh air alone.

It is made clear by the patentees, Peters and Hungerford,

that their device can be used anywhere to maintain uniform conditions as regards temperature, humidity and ventilation.

Eggs could be set in stage incubation in the room of the Peters and Hungerford patent after the manner of Bonnemain and hatched successfully.

The Article Entitled, "Ventilator" Appearing in Volume III of Knights American Mechanical Dictionary on Pages 2704 and 2705 Thereof (R. 811-813).

By reference to said article, it can be seen that it includes a large cut, having printed below the same the following words, to-wit, "Sectional view of the Senate wing, United States Capitol, showing the pressure and exhaust ventilating apparatus"; the said dictionary shows on its title page that it was published by Houghton, Mifflin and Company at Boston in 1884.

This is, of course, a proper subject for judicial notice but the photostat exhibit was stipulated by counsel for the parties.

Professor Rowley briefly considered the disclosure made in this article under direct examination (R. 284-285) and under cross examination (R. 328-329). The description contained in the article itself is short and reads as follows:

This article is illustrative of the fact that the same type of air conditioning is used for human beings as is used in incubators for hatching chicks. The U. S. Senate Chamber could be used as an incubator.

SECTION 3. THE TRUE MEANING OF CLAIM 1 OF THE PATENT AS DETERMINED FROM THE FILE-WRAPPER RECORD.

The estoppels arising from the file-wrapper record of the Smith patent in suit, while the application for that patent was being prosecuted in the U. S. Patent Office, confine the claim to the meaning accorded thereto by the Circuit Court of Appeals for the Eighth Circuit in this case.

A certified copy of the file-wrapper record of the Smith patent is in evidence as "Defendants' Exhibit O" (R. 847-890).

Said file-wrapper record will now be traced in so far as deemed necessary to determine the meaning accorded to the relied on method claim 1 at the time the patent was granted. It will be helpful to first make a brief summary statement.

Four groups of method claims were presented, at different times, and the first three of these successive groups of method claims were successively rejected on references cited and thereafter eliminated by the applicant; but the fourth group of claims were all narrower and were passed as allowable and matured into what are now claims 1, 2 and 3 of the patent.

Petitioner's chief contention in this case is that claim 1 of the patent calls simply for stage incubation and forced draft combined in a hatching process. *All of said rejected and eliminated groups of claims contained one or more claims, which, in substance, called simply for stage incubation and forced draft and none thereof were ever allowed.* Petitioner is, therefore, now estopped from receiving any such broad interpretation of the claim. This fact will now be verified by tracing the file-wrapper record in detail.

When the application was first filed, it contained five method claims, numbered respectively 1, 2, 3, 4 and 25 and

of these claims, claims 1 and 25 were the broadest. They read as follows:

> "1. The method of hatching eggs by arranging the eggs in a column and applying heated forced air about the eggs, the heated air being adapted to the eggs in various stages of incubation.
>
> 25. The method of hatching eggs by arranging the eggs in a column one above the other and forcing heated air through said column."

Claim 2 was more limited than claims 1 and 25 inasmuch as it called for the eggs in the earliest stages of incubation to be arranged in substantially horizontal planes at one place in the egg column and it further called for the eggs in the later stages of incubation to be arranged in planes inclined to the horizontal and at a different place in the same column of air.

Claim 3 was narrower than claims 1 and 25 inasmuch as it called for the eggs in different stages of incubation to be placed in different parts of the column of heated air, and it also called for the eggs in the more advanced stages to be arranged in tilted position.

Claim 4 was narrower than claims 1 and 25 inasmuch as it called for the eggs in the earliest stages of incubation to be in one place in a column so arranged that the air can circulate around them and the eggs in the more advanced stages of incubation to be arranged in a different place of the column of air whereby the air will be forced through and around the eggs.

Claims 2, 3 and 4 carried limitations therefore which prevented them from being given an interpretation to cover merely stage incubation and forced draft. Claim 1, however, was a broad claim calling simply for a method of hatch-

ing eggs wherein stage incubation and a forced draft was employed. Claim 25 was by far the broadest claim of the lot in that it simply called for a method of hatching eggs by arranging the eggs in a column one above the other and forcing heated air through the column. In other words, claim 25 makes no call for stage incubation.

On the first official action, paper No. 2 (R. 873), and dated Nov. 1, 1916, the original method claims 1 and 25 were rejected on the prior U. S. patents to Morgan 272,744 of Feb. 20, 1883; Winkler 286,756 of Oct. 16, 1883; Bassini, et al., 330,457 of Nov. 17, 1885; Campbell 344,474 of June 29, 1886; Boyd 828,181 of Aug. 7, 1906; Van Keuren 1,160,793 of Nov. 16, 1915, and on the German patents to Mann 117,089 of Feb. 4, 1901, and Stulik 155,915 of Nov. 11, 1904.

In respect to these references, it was stated, in the official action, as follows, to-wit:

> "The references show the 'column.' The air is forced by the arrangement of the heating means which causes the heated air to rise and thus produce the circulation of air."

Then the said original method claims 2, 3 and 4 were rejected in a paragraph reading as follows, to-wit:

> "Claims 2, 3 and 4 are rejected on Stulik suggesting arranging the eggs in different places in the column at different periods of incubation in view of Perkins, 745,458, of December 1, 1903, suggesting inclining some of the eggs."

Then on the first amendment filed March 6, 1917, paper No. 3 (R. 879), the applicant amended claim 1 by substituting the word "impelled" for the word "forced" in line 2 of the claim and he made minor amendments in claims 2 and 3. With the amendment applicant's attorneys presented an ar-

gument and asked for reconsideration and allowance of the claims.

On the next or second official action, dated March 24, 1917, paper No. 4 (R. 885), the Examiner again rejected all of the method claims citing some additional references. His action in part reads as follows:

> "Claim 1 is rejected on each of Bassini, *et al.*, Campbell, and Bell and Boyd, suggesting eggs in a column and heated air that arises and passes around them in view of each of Endemann, 120,253, October 24, 1871; Jones, 152,644, June 30, 1874; Verna, 891,019, June 16, 1901, suggesting 'impelling' the air. * * *
>
> "Claims 2 and 3 are rejected in the same manner as claim 1, in view of Winkler, suggesting eggs of various stages of incubation arranged at different places in the column of air (in Winkler air comes in through k and goes out through the openings in A) and of Christianson, suggesting some eggs in inclined planes. This gives the process claimed as it would not be inconsistent with the process disclosed in this claim to apply heat in the middle of the column of air.
>
> "Claim 4 is rejected in the same manner as claim 3, omitting Christianson.
>
> "Claim 25 is rejected in the same manner as claim 1."

Then, after considering also the apparatus claims, and rejecting most thereof, the Examiner ended his letter with a sentence which reads as follows, to-wit:

> "As the references indicate, applicant has new matter in his application, but has not *limited* his claims sufficiently to bring it out."

Then the applicant submitted a second amendment, filed April 7, 1917, paper No. 5 (R. 893). In this amendment

claim 25 was cancelled. Claims 2, 3 and 4 were further limited by amendment and claim 1 was amended to read as follows (the part added by this second amendment and by the first amendment being here placed in Italics):

> "1. The method of hatching eggs by arranging the eggs *of various stages of incubation* in a column and applying heated air *impelled* about the eggs, the heated air being adapted to the eggs in various stages of incubation."

Although claims 1, 2, 3 and 4 were narrowed by the limitations added to the original claims, it is clear that the amended claim 1 calls simply and only for a method of hatching eggs wherein stage incubation in a column and a forced draft were employed. The expression in that claim "applying heated air impelled about the eggs" is the same identical thing as a call for forced draft.

On the next or third official action, dated April 12, 1917, paper No. 6 (R. 899), all of the amended method claims were rejected in paragraphs of Examiner's letter reading as follows, to-wit:

> "Claims 1 and 4 are rejected on the same references as in the last office action, taken with Winkler, which suggests trays arranged with the newest at top and oldest at bottom but with heaters in the middle of the column. This would give the method claimed.
>
> "Claims 2 and 3 are rejected in the same manner as claim 1 in view of Christianson."

On the next or third amendment, paper No. 7, filed April 23, 1917 (R. 903), the applicant cancelled all his standing claims, numbered 1 to 12, inclusive, which included all of the method claims then in the case and substituted six new method claims which form the second group of method claims

submitted. These substituted claims are numbered from 1 to 6, inclusive, and they read as follows:

"1. The method of hatching eggs by arranging the eggs in various stages of incubation in a column, the eggs in different stages of incubation being in different levels, and applying heated air driven at a predetermined speed about the eggs, whereby the heated air will be adapted to eggs in various stages of incubation.

"2. The method of hatching eggs by arranging in *one chamber* eggs in various stages of incubation, the eggs in different stages of incubation being in different parts of said chamber, and applying heated air driven at a predetermined speed or velocity about all the eggs, whereby the heated air will be adapted to eggs in various stages of incubation.

"3. The method of hatching eggs, consisting arranging eggs in various stages of incubation in an enclosure, the eggs in different stages of incubation being placed in different levels and applying heated air to said eggs, said heated air being driven by mechanical means at a predetermined speed about the eggs to maintain same at a maximum degree of temperature of 105° and a minimum degree of 100°.

"4. The method of hatching eggs by arranging the eggs in various stages of incubation in an enclosure and placing the eggs in different stages of incubation in different places in the enclosure, and thereafter forcing heated air at a predetermined speed or velocity about all of the eggs, whereby the eggs in the most advanced stages of incubation will be maintained at a degree of temperature less than 105° by the velocity of heated air, substantially as specified.

"5. The method of hatching eggs by arranging eggs

in various stages of incubation in an enclosure and placing the eggs in different stages of incubation in different places in the enclosure, and thereafter driving the heated air by mechanical means at a predetermined speed about all of the eggs and driving same through and between the eggs in the more advanced stage of incubation, whereby the temperature of said eggs will be maintained at something less than 105° temperature, for the purpose specified.

"6. The method of hatching eggs by arranging eggs in various stages of incubation in an enclosure and placing the eggs in different stages of incubation in different places in the enclosure, and thereafter driving the heated air by mechanical means at a predetermined speed about all of the eggs and driving same through and between the eggs in the more advanced stage of incubation, whereby the temperature of said eggs will be maintained at something less than 105° temperature, said eggs in the more advanced stage of incubation being raised in tilted position, for the purpose specified."

Attention is called to the fact that these claims, although much narrower than original claims 1 and 25, first submitted, still called for stage incubation and forced draft, but the stage incubation called for was of a type wherein the eggs in different stages of incubation were located at different levels and the forced draft circulated the heated air at a predetermined speed adapted to the eggs in various stages of incubation. The temperature of maintenance of the eggs, *i. e.*, below 105°, was specified in claims 3, 4, 5 and 6 and in claim 3 there was a limitation placed on the temperature at which the eggs could be maintained at a maximum of 105° and a minimum of 100°. It should be

here noted that although the patent specifically states that in accordance with the Smith process, the eggs are to be maintained at a temperature of between 105° and 100° F., neither the Smith commercial machine nor the Snow machine operate at a temperature above 100° F. The temperature maintained in these machines is above 99° and below 100°. Attention is also called to the fact that in the second group of claims submitted and above quoted, an attempt to differentiate the Smith process from the references was made by including in the claims the words, "at a predetermined speed."

In the argument accompanying the amendment, attention was called to the added limitations in the claims and the importance thereof, in the judgment of applicant's solicitors.

In the next or fourth official action dated May 3, 1917, paper No. 8 (R. 911), all of the six substituted method claims, in the second group submitted, were rejected in paragraphs reading as follows, to-wit:

> "Claims 1 and 2 are rejected on each of Morgan, Perkins, Boyd and Stulik, in view of Winkler. In each of the first four references, the temperature of the heated air in the column is kept the same by the thermostat that controls the heater which drives the air, so that the speed of driving the air is predetermined by adjusting the thermostat. Winkler suggests the eggs in different stages of incubation being in different levels.
>
> "Claims 3, 4 and 5 are rejected in the same manner as claim 1, in view each of Endemann, Jones, *et al.*, and Verna, suggesting the mechanical means.
>
> "Claim 6 is rejected on Perkins, in view of Winkler, Perkins suggesting the tilting of some of the eggs."

Then after new attorneys had been appointed for prosecut-

ing the applications, paper No. 9 (R. 913), a fourth amendment was submitted, filed June 28, 1917, paper No. 10 (R. 915). In this fourth amendment, the applicant cancelled claims 1 to 8, inclusive, then standing in his application, which included *all* of the second group of six method claims last previously inserted in the case, and he substituted three new method claims. The third group submitted, read as follows, to-wit:

"1. The method of hatching a plurality of eggs in different stages of incubation by subjecting all of said eggs to heated air and by supplementing the natural draft of the heated air with the forced draft to increase the velocity of heated air about the eggs without changing the temperature of heated air, whereby the units of heat will be carried from the eggs in the more advanced stage of incubation to those in a less advanced stage.

"2. The method of hatching a plurality of eggs in different stages of incubation by subjecting all of said eggs to heated air and by using a forced draft to increase the velocity of heated air without changing the temperature, whereby the units of heat will be carried away from the eggs in the more advanced stage of incubation to those in a less advanced stage, for the purpose specified.

"3. The method of hatching a plurality of eggs in different stages of incubation by subjecting all of said eggs to heated air and by supplementing a draft produced by mechanical means to increase the velocity of the air without increasing the temperature thereof whereby the units of heat will be carried from eggs in more advanced stage to those in the less advanced stage of incubation."

Upon inspection of these so substituted method claims, in the third group submitted, and by comparison with the first and second groups of method claims, which had been previously submitted, it will be seen that the third group submitted above quoted were more limited than the first group submitted and in certain respects they were more limited than the second group submitted. Each of the third group of claims still called for a method of hatching eggs which included stage incubation and forced draft but each claim also called for the natural draft of the heated air to be *supplemented* by a forced draft to increase the velocity of the air "whereby the units of heat will be carried from the eggs in the more advanced stage of incubation to those in the less advanced stage." The amendment was accompanied by an argument, said to be a repetition in substance of an oral one previously made by the applicant's attorneys with the Examiner, wherein the forced draft was emphasized and stated to be the "essential feature of the invention," and further stating that the applicant seemed to be the first to employ a *forced draft.* The attorneys' exact words were:

> "A great many experiments have been made to provide a natural draft that would equalize the temperature, but the best that could be accomplished disclosed a difference of about 15 degrees between the upper and lower part of the egg chamber, whereas when a forced draft was employed a substantially equal temperature was maintained throughout the chamber, showing that the *essential feature of the invention* is a forced draft and applicant seems to be the first to employ a forced draft."

On the next or fifth official action, dated June 30, 1917, paper No. 11 (R. 921), the said third group of method claims

1, 2 and 3, were all rejected on references. Most of this action is here quoted:

> "Attention is called to Figs. 1 to 5, inclusive, and 7 of Koons, 916,454, March 30, 1909, in which if the pipes 54 were omitted there would be a natural draft around 12, through 8 and out of the egg chamber as indicated by the arrows in Fig. 1. The use of the pipes 54 adds a 'forced draft' that increases the speed of the air but does not heat the air in 1. To arrange the eggs on the trays so that the air will first strike the eggs in the more advanced stage and then those in the less advanced stage is suggested by Winkler.
>
> "Claims 1, 2 and 3 are rejected as explained, and also on Scott, 709,650, of September 23, 1902, class 119/140, having a 'forced draft' produced by 22 in view of Winkler, suggesting using a plurality of trays to produce the mode of operation in the last three lines. These claims are also rejected on Boyd in view of each of Scott and Koons suggesting connecting the part k of Boyd to the heater to get a forced draft and of Winkler suggesting putting the more advanced eggs in the lower tray.
>
> "In claim 3, mechanical means does not distinguish from the structure of the references. *Even if it did, there would be no invention in a method claim in substituting a fan for the draft forcing means of Koons and Scott.*"

Then the fifth or final amendment was filed on Feb. 26, 1918, paper No. 12 (R. 925). The descriptive portion of the specification was amended, line 23, page 4, by insertion of the following matter therein:

> "The outlets 28 for the release of foul air are made of such restricted capacity as to prevent the undue es-

cape of moisture. It is possible to limit the openings and so conserve the moisture by reason of the vitalizing effect of the power driven current upon the body of the air within the chamber."

This amendment to the descriptive portion of the specification was supported by a supplemental oath of the applicant. It should be noted that this was the first time during the prosecution of the application that any word had been said about the vitalizing effect of the power driven current.

In the said fifth or final amendment, the third group of method claims which had been previously submitted and then stood as claims 1, 2 and 3, were cancelled and a final fourth group of method claims were substituted. These substituted claims were numbered 1, 2 and 3, and they matured into claims 1, 2 and 3, respectively, of the patent. They need not be here quoted.

Also submitted with this last amendment was an argument for the allowance of the three method claims emphasizing the power driven current of applicant's and the *vitalizing effect of the power driven current* on the eggs placed at different levels.

It should be noted that claim 1 of the patent submitted in the amendment, dated June 30, 1917, and above last referred to, is *narrower,* in many material respects, than *any* previous claim that had been submitted, rejected and cancelled and which called for the two features of stage incubation and forced draft. Claim 1 of the patent calls for the method of hatching to be carried out "in a closed chamber having restricted openings of sufficient capacity for the escape of foul air without undue loss of moisture." This is a limitation not found in the previous method claims submitted. It is a recognition of the importance of vitalizing

the air during each cycle of air movement so that the vitalized air will be carried first to the eggs in the advanced stage of incubation where most needed. Then claim 1 of the patent further calls for "applying a *current* of heated air." Air moving in "current" form had not been specified in any of the earlier submitted claims. Here was a distinct limitation put in claim 1 of the patent to distinguish Smith's air movement from other forms of air movement, such, for example, as mere agitation or general mixing and diffusion. In other words, the word "current" was obviously placed in the claim as a *limitation* to preclude it from covering all forms of air movement caused by *forced draft* as now contended for by petitioner. The "current" of claim 1 of the patent was further limited as being "of sufficient velocity to circulate, diffuse and maintain the chamber at substantially the same temperature whereby the air will be vitalized, the moisture conserved and the units of heat will be carried from the eggs in the more advanced stage of incubation to those in a less advanced stage for the purpose specified." This limitation in the claim *conclusively* precludes the patentee from an interpretation of the claim to cover merely forced draft and stage incubation when the previously submitted, rejected and cancelled claims are considered and the vitalizing effect of the current moving first to the eggs in the advanced stages and then to those in the less advanced stages is thoroughly understood as has been previously brought out in this brief in section 1 of this chapter.

From the above consideration of the file-wrapper record of the patent in suit, it will be seen that Smith began the prosecution of his application for patent by seeking to secure a claim or claims broad enough to cover merely stage incubation and forced draft; that such claims were denied him by the Patent Office; that he then limited his method

claims in one respect after another to distinguish the same from the references; that he made no progress in securing the allowance of method claims until after three successive groups of method claims calling, among other things, for stage incubation and forced draft, had been submitted, rejected and cancelled and until he submitted the closely limited method claims of the patent in suit; that these claims, of which claim 1 of the patent in suit is the broadest, were only allowed because *Smith gave up his contention for a claim broad enough to cover merely stage incubation and forced draft* and limited the said method claims to a *current* of heated air so circulated as to cause the air to be vitalized and to cause this vitalized air to move first to the eggs in the more advanced stage of incubation and then to the eggs in the less advanced stage of incubation.

Conclusion From the File-Wrapper of the Smith Patent in Suit.

In view of the conduct of the patentee, Samuel B. Smith, in the handling of his application which matured into the patent here in suit, as established by the file-wrapper record of that patent above considered, it is perfectly obvious that, under the well settled law of the subject, said Smith, his heirs, legal representatives and assigns, are now *estopped* from receiving any interpretation of said relied upon claim 1 of the said Smith patent here in suit, which would accord thereto a meaning as broad or broader than the claims which had been presented by him in his application, rejected on references, and then eliminated by him.

In other words, the said patentee, Samuel B. Smith, his heirs, legal representatives and assigns, are, under the long settled law of the subject, *estopped* from receiving an inter-

pretation of said claim 1 of the Smith patent in suit broad enough to cover merely stage incubation and forced draft in an egg hatching method.

See *Walker on Patents* (6th Ed.), Section 237, and the cases cited in footnote 282, page 323 of that book.

Especial attention is called to the following cases, to-wit:

Shepard vs. Carrigan, 116 U. S. 593, 598;

Roemer vs. Peddie, 132 U. S. 313-317;

Morgan Envelope Co. vs. Albany Paper Co., 152 U. S. 425;

Hubbell vs. United States, 179 U. S. 77;

Kokomo Fence Machine Co. v. Kitselman, 189 U. S. 8;

Webber Electric Co. vs. E. H. Freeman Electric Co., 256 U. S. 668;

I. T. S. Rubber Company vs. Essex Rubber Company (Nov. 22, 1926), 272 U. S. 429-*443, 444;*

Smith, Administratrix vs. Magic City Kennel Club, Inc., et al., 282 U. S. 784.

The file-wrapper record of the relied upon claim 1 of the Smith patent in suit is not correctly stated in the petitioner's brief and none of the decisions of the courts cited therein give any occasion to change or modify what has been, or will be said about this file-wrapper record in this brief.

The existence of the file-wrapper estoppel against the patentee, Samuel B. Smith, above pointed out, has been recognized by the courts in numerous of the prior adjudications of this same claim 1 of said Smith patent, 1,262,860. For example, this remark applies to the following cases:

Buckeye Incubator Co., et al., vs. Petersime, C. C. A. 6th, 19 F. R. (2) 721;

Buckeye Incubator Co., et al., vs. Blum (decision by Judge Westenhaver), 17 F. R. (2) 456;

Buckeye Incubator Co., et al., vs. Blum, C. C. A. 6th, 27 F. R. (2) 333;

Buckeye Incubator Co., et al., vs. Hillpot, D. C. D. N. J., 22 F. R. (2) 855;

Buckeye Incubator Co., et al., vs. Hillpot, C. C. A. 3rd, 24 F. R. (2) 341.

Special attention is called to what Judge Westenhaver said in the Blum case on pages 459-461 of the reported decision, 17 F. R. (2) 456; to what the trial court, Judge Bodine, said in the Hillpot case on page 857 of the reported case, 22 F. R. (2) 855; and to what the Circuit Court of Appeals for the 3rd Circuit said on page 344 in the Hillpot case, 24 F. R. (2) 341.

The holdings of said courts in said Petersime, Blum and Hillpot cases as to the true meaning of the relied upon claim 1 of the Smith patent in suit will be specifically pointed out in the next or fourth section of this chapter of this brief.

The courts have no power to make for a patentee a new claim of broader scope than any of the relied upon claims contained in said patentee's patent:

Keystone Bridge Co. vs. Phoenix Iron Co., 95 U. S. 274;

Burns vs. Meyer, 100 U. S. 671;

Railroad Company vs. Mellon, 104 U. S. 112;

White vs. Dunbar, 119 U. S. 47-52;

Hubbell vs. United States, 179 U. S. 77;

I. T. S. Rubber Company vs. Essex Rubber Company (Nov. 22, 1926), 272 U. S. 429-443, 444;

Houser, et al., vs. Starr, C. C. A. 6th, Feb. 14, 1913, 203 F. R. 264;

and practically all of the other cases in the group of U. S. Supreme Court cases last previously cited.

The meaning of claim 1 of the Smith patent at the time of the grant of the patent, as determined from the file-wrapper record has now been made clear. It should be noted, however, that Smith's own prior public usage, proven to have taken place at Cleveland, Ohio, in 1913 and 1914, over two years before his application for patent was filed, was not known to the Patent Office officials at the time when the Smith patent was granted, or at any time while that application was pending, so far as can be ascertained from the file-wrapper record of the patent. It is a moral certainty that this prior public usage was not known to the official Examiners who acted on the Smith application. If reliable proof of that prior public usage had been before the said Patent Office officials, while the Smith application was pending, the probability is that the method claim 1 of the Smith patent would never have been granted. The meaning of the claim will, therefore, have to be further qualified to distinguish from the said proven prior public usage by Smith and to also distinguish from all the newly discovered prior patents and publications, certain of which have hereinbefore been identified and referred to and which *were not cited* as references on the file-wrapper record of the said Smith patent.

We will next consider a few of the prior adjudications of this same claim 1 of the Smith patent here in suit.

Section 4. The True Meaning of Claim 1 of the Smith Patent No. 1,262,860, as Heretofore Determined by the Courts.

The Prior Adjudications of this Smith Patent 1,262,860, in suit are Identified in the Appendix.

The prior adjudications involving claim 1 of the Smith patent in suit and rendered prior to the decision of the Circuit Court of Appeals for the Eighth Circuit in the instant case, and prior to the decision of the Circuit Court of Appeals for the Ninth Circuit in the Waxham case are identified in the Appendix to this brief with sufficient comment to make clear which thereof are pertinent and which thereof are non-pertinent to the determination of the true meaning and scope of the relied upon claim 1 of said Smith patent.

By reference to the statements there made, it will be seen that the only prior adjudications of any weight for the determination of that question are those rendered in the Petersime case, the Blum case and the Hillpot case. All of these cases reached the proper Circuit Courts of Appeal, and as to the expression "cases" here used, it is intended to include the decisions of the trial court and the decisions of the Circuit Courts of Appeal.

The Petersime Case.

The case was entitled, *Buckeye Incubator Co., et al., vs. Petersime, et al.,* and brought in the Southern District of Ohio. The trial was before District Judge Hickenlooper who gave an oral decision thereon dated June 30, 1926, and filed a written memorandum September 17, 1926. The pat-

ent was declared valid but not infringed. This decision was not reported.

In the Circuit Court of Appeals for the Sixth Circuit, this case bears the same title. The hearing was before Circuit Judges Dennison, Mooran and Knappen, and the decision of that Court was dated June 10th, 1927, and reported in 19 F. R. (2) 721. The trial court was affirmed.

In Judge Hickenlooper's decision, it is not stated what particular claims of the Smith patent were there relied upon but, in the decision of the Sixth Circuit Court of Appeals, it is stated that the method claims 1, 2 and 3 of said Smith patent were in issue.

In the early part of Judge Hickenlooper's decision, he indicated that, although he was constrained by the previous adjudication of this patent in an earlier case within his own Sixth Circuit Court of Appeals, to treat the said patent as valid, he would nevertheless express his own individual feeling on that point; and he said:

> "I have had considerable difficulty in determining the exact element of patentability in the Smith patent, which raises the discovery beyond the mere exercise of mechanical skill to the dignity of invention."

He then goes on to state the ends to be accomplished by the hatcher of eggs and then makes the following statement:

> "What Dr. Smith seems to the Court to have done was simply to draw from the prior art recognized devices for accomplishing these desired aims, or necessary aims; and he seems to me to have done this in the same manner that any skilled heating and ventilating engineer might have done it, or as any mechanic skilled in the heating and ventilating art might have done it. And in saying this, I realize that I draw no distinction between the incubating art as a separate art and the heat-

ing and ventilating art. This distinction seems to me not well founded."

Judge Hickenlooper then went on to consider certain of the prior patents introduced into that case and then stated (page 4 of the decision) that if the invention is claimed as a process it must be strictly limited to the actual disclosure made by the patentee. He also states (page 3) that the patent might be sustained upon the hypothesis "that the element of invention, the discovery which Dr. Smith made in this case, had primarily to do with the order of sequence in which the heated air was applied to eggs in the various stages of incubation; * * *."

Although Judge Hickenlooper did not specifically describe the structure of the Petersime machine, it is described in the third paragraph of the decision of the Sixth Circuit Court of Appeals, 19 F. R. (2) 721, 722, as follows:

> "The Petersime device is an open box without partitions, in which there are egg trays of different sizes arranged in a drum. The heated air is taken in at the bottom of the cabinet and rises primarily because it is heated. There are inlets for air at the bottom and outlets at the top. The air in the drum is agitated by a slow moving stirrer, but there is no defined current created by the agitation, that drives the air first upon the eggs in the more advanced stage of incubation, although it is admittedly so mixed that the heat units from those eggs are diffused throughout the entire drum. There is a thorough mixing of the air, but no application of defined currents."

To make clear the structure and operation of the Petersime incubator involved in the Petersime case, there was introduced into evidence at the trial of the instant case a

copy of Petersime patent No. 1,562,787, of date Nov. 24, 1925, marked "Defendants' Exhibit V" (R. 835-842).

By reference to that patent, it will be seen that Petersime there illustrates and describes an incubator, wherein there is a rotary drum which contains the egg trays and a fan or agitator of such structure and so mounted that it has horizontal blades, which rotate around the egg containing drum somewhat after the manner of the stirrer of an ice cream freezer. Judge Hickenlooper dismissed the bill of complaint for non-infringement.

Referring to the Circuit Court of Appeals decision in the Petersime case, the Court clearly brings out the fact that the appellees contended for the same broad meaning of claim 1 of the Smith patent as contended for in the instant case. The following quotation is taken from the said reported decision, page 721:

> "In the advanced stage of incubation, eggs generate and emit heat. They also require more oxygen than eggs in the earlier stages. Proper incubation must take into account the disposition or diffusion of this emitted heat, the carrying off of the carbon dioxide further emitted from the further advanced eggs, and the supplying of the additionally needed oxygen to those eggs, without undue loss of the requisite moisture and uniformity of temperature. Smith *claims* that his invention *covers any process of applying heated air to eggs at different stages of incubation whereby these essential steps are effected.*"

Said Court on page 722, of the reported decision, makes it clear as to what it considered claim 1 of the patent covered:

> "The question is whether the broader phrase of claim 1, 'applying a current of heated air,' includes the agita-

tion of air, not in defined currents, but so that it will produce a diffusion of heat units resulting in uniformity of temperature.

"Looking to the language of the claims, as indeed to the device that Smith uses, it *would seem that he had in mind a process by which the warm air taken into the corridor would be currently directed, so as to strike first the eggs in the more advanced incubation,* take to them the additionally needed oxygen, and carry the heat units therefrom to other parts of the two compartments, thus effecting, in part, at least, a uniformity of temperature throughout the egg chambers. This interpretation, we think, is borne out by the specifications. They refer to a 'forced circulation of hot air,' to subjecting the eggs to a 'column of air,' to moving the eggs to a different position 'with reference to the forced circulation of hot air,' to forcing the air 'to pass between the different eggs' which will in effect 'act as a cooling medium' for the more advanced eggs, all of which contemplate a defined current of air by which certain eggs may be cooled and given the additionally needed oxygen, and others may be warmed by the heat units which the current carries from the more advanced eggs. *The file-wrapper history of Smith's patent tends to support the same conclusion.* This conception of a current of air driven in a definite or predetermined direction is different, we think, from the Petersime process, by which diffusion of heat units and uniformity of temperature is obtained by the slow stirring or agitation of the air in the egg chamber.

"Judgment affirmed."

It will be seen that the Circuit Court of Appeals in the

Petersime case interpreted claim 1 of the patent in almost identically the same manner as did the Circuit Court of Appeals for the Eighth Circuit in the instant case.

The Blum Case.

The title of this case before the District Court for the Northern District of Ohio, Eastern Division, is *Buckeye Incubator Co., et al., vs. Blum.* The decision, written by Judge Westenhaver, was dated Feb. 14, 1927, and is reported in 17 F. R. (2) 456. In his said decision, the bill of complaint was dismissed for non-infringement. Judge Westenhaver's decision is very instructive and should be read in full.

The title of this case before the Circuit Court of Appeals, for the Sixth Circuit, is *Buckeye Incubator Co., et al., vs. Blum.* It was tried before Circuit Judges Denison and Moorman and District Judge Anderson. The opinion was written *Per Curiam* and was rendered July 6, 1928, and is reported in 27 F. R. (2) 333. The decision of the District Court was affirmed.

Only claims 1 and 2 of the Smith patent were sued upon. The plaintiff in the Blum case made the same contention for the meaning of claim 1 of the Smith patent as has been made by the petitioner in the case at bar. This is shown in Judge Westenhavers decision on the case in the District Court where he states, 17 F. R. (2) 456, page 459:

> "Plaintiff contends that Smith's method and claim 1 are broad enough to include any hatching method whereby eggs in different stages of incubation are enclosed in the same incubator chamber, and air is so agitated that heat units given off by eggs in the advanced stage will be diffused throughout the chamber and around eggs in a less advanced stage. Defendant,

on the other hand, contends that claim 1 calls for a process only, which requires the application of a current of heated air, more or less controlled, first to eggs in the advanced stage, and does not include merely stirring or agitating air, even though by so doing the temperature is kept reasonably uniform, regardless of the varying stages of incubation."

From this quotation it will be seen that the plaintiff in the Blum case, like the petitioner here, contended that claim 1 of the Smith patent was broad enough to cover a hatching method including any type of stage incubation and forced draft.

Judge Westenhaver, on page 459 of his reported decision, makes clear what the structure of the Aero incubator used by the defendant in the Blum case was. He states that, "In operating the three-stack incubator, all the eggs are not set at the same time, but one stack at one time and the others at successive intervals, so that the eggs in the same chamber are in varying stages of incubation." He then goes on to say:

> "Defendant's device does not have a fan to create air currents and circulate them through the stacks of eggs. It does not have a corridor separated from the stack of eggs *by partitions* with openings under or over the same between the corridor and the egg chambers. It does not drive or force air over heated coils downward through the central corridor and up through the column of egg trays. It has all stacks of eggs in the same chamber, not in chambers separated one from the other by *partitions* and corridors. The incubator is equipped with a pulley driven shaft disposed axially through the chambers and egg stacks. On this shaft are wired boards 40

inches long and 4 inches wide. One of these boards is placed at each end and one between each stack of eggs. The boards are disposed at right angles to each other, said by defendant to be merely for the purpose of properly balancing their weight. The shaft is driven at a moderate rate of speed, so that the outward tips of the revolving boards move only at the rate of 2,000 feet per minute, whereas the outward tips of the fan blades of plaintiff's 18-inch fans revolve at a rate of more than 11,000 feet a minute. The paddles of defendant's device revolve at right angles to the shaft, and are not disposed at an angle to the egg shafts, so that the air is not driven laterally against the eggs, whereas the fan blades of plaintiff's device are disposed at the usual angle appropriate to drive air in a *current* on the principle of a forced draft. These are the main differences in construction and principle of operation between the two devices."

From the above description, of the Aero incubator, it is clear that the incubator used by Blum, sometimes hereafter called the Blum incubator, had a casing in which there were several spaced tiers of superimposed egg containing trays; that there was a drive shaft running horizontally through this casing and which shaft had fixed thereto, in the spaces between the different tiers or stacks of egg trays, boards 40 inches long and 4 inches wide which acted as agitators or paddles for stirring the air to keep the temperature of all the eggs in the incubator approximately the same. These paddles in the Blum incubator revolved at the rate of 2,000 feet per minute at their outer tips. The type of air agitation used by Blum was not materially different than that used by respondent, as will later appear in Chapter IV of

this brief devoted to "Non-Infringement."

After giving the above quoted description, Judge Westenhaver made the following further statements, page 459 to 460, of the reported decision:

> "It is defendant's contention that currents of air, as that term is and must be understood in claim 1, are not found in his method. Defendant's device was operated under my observation at this hearing. Undoubtedly the air within the incubator chamber is in commotion. It is not at rest in any part of the chamber. Obviously, as the paddles revolve, the air in front of them is compressed, and an area of lower pressure is produced behind them. The most direct effect is to drive the air against the sides and top and bottom of the chamber as well as to draw it towards the areas of low pressure. It may be accurately described as a stirring and churning operation. It agitates the air, but does not drive or force it in any uniform or ascertainable direction. If adequate uniformity of temperature is obtained, it is accomplished only in this manner. In this sense and manner only can it be said that heat units are carried from eggs in the advanced to eggs in a less advanced stage of incubation. If claim 1 calls for a current of air forcibly created and driven against the eggs in any definite or ascertainable manner or direction, then defendant's device does not appropriate that step. It is not capable of creating or directing such a current or functioning in accordance with that principle.
>
> "These considerations bring us to the crucial question: What is meant in claim 1 by the term, 'applying a current of heated air'? This meaning must be extracted from the ordinary and usual meaning of the words employed, unless, indeed, the patent specifications or the

Patent Office proceedings have affixed thereto another and different meaning. In New Standard Dictionary, 'current' is defined as 'a continuous movement in the same direction, as of a fluid; flow, stream; also the fluid that is in motion; as a current of air or water.' As thus defined, Smith's method produces and applies a current. If this definition is accepted, it must be found that defendant's method does not meet its requirements. There is no continuous movement of air in the same direction, or in any definite or ascertainable direction. It is air in commotion or agitation rather than air in movement in a given direction.

"Turning to the specifications, we find this definition or meaning more strongly emphasized. It is said: 'There is a forced circulation of hot air through the chamber.' It is pointed out that the eggs will be placed in a horizontal plane, 'and after the eggs have been subjected to the circulation of hot air for a predetermined time * * * they will be moved to a different position with reference to the forced circulation of hot air.' The purpose is to force hot air to pass through the eggs in the more advanced stage of incubation and act on them as a cooling medium and carry the heat units therefrom toward the cooler eggs. It is further said: 'The speed or velocity of the circulating air should be such as to carry the heat away from the eggs in the later stage of incubation.' And still further: 'The method contemplates the application of hot air circulating in a column with such speed as to keep the temperature substantially uniform and so arranging the eggs that the fresh eggs are placed at one point in the column of air and held in a horizontal plane until they reach a predetermined stage of incubation, and then put at a dif-

ferent point in the same column of air and kept in planes inclined to the horizontal, and thereafter placed at such a point in the column of air that the forced draft of air acts to hold the eggs at a uniform temperature.'

"Thus we see that Smith himself affixed a meaning to the words 'applying a current of heated air.' The various expressions used are 'a forced circulation of hot air,' or 'speed or velocity of the circulating air,' or 'a column of air,' or 'a column of eggs.' In brief, the eggs are put in a column, the air is forced and circulated in a column through those eggs, and is applied first to eggs in an advanced stage of incubation, and later to those in a less advanced stage. In defendant's method there is no forced circulation of hot air; much less is there any column of hot air, with eggs disposed therein in different stages of incubation. In my opinion, it is not possible to procure either a current or column of heated air, functioning in the way pointed out in Smith's patent, without means for creating a forced draft, and without means for restricting more or less the channels through which it is driven. *Smith's method cannot be practiced without these means.*"

Judge Westenhaver next takes up the file-wrapper record of the Smith patent in suit and traces some portions thereof relating to the relied upon method claims 1 and 2 thereof. This appears on pages 460 and 461 of his said decision as reported and reads as follows:

"Turning to the file wrapper history of Smith's patent, we find these conclusions much strengthened. His application, as originally filed contains four method claims. Claim 1 thereof was in these words:

> 'The method of hatching eggs by arranging the eggs in a column and applying heated air forced about the eggs, the heated air being adapted to the eggs in various stages of incubation.'

"This as well as the other three method claims was rejected. It was then amended by inserting after the word 'column' the words 'of various stages of incubation' and by striking out the word 'forced' and by inserting the word 'impelled.'

"After repeated rejections of all method claims, new method claims were again submitted. Of these claim 2 is in these words:

> 'The method of hatching eggs by arranging in one chamber eggs in various stages of incubation, the eggs in different stages of incubation being in different parts of said chamber, and applying heated air driven at a predetermined speed or velocity about all the eggs, whereby the heated air will be adapted to eggs in various stages of incubation.'

"This amended claim, as well as all other amended method claims, was again rejected. Later, after an oral hearing and the submission of evidence (relating to the Koons U. S. Patent, 916,454, of March 30, 1909), the more limited claims now in the patent were presented and allowed."

* * * * * * * * *

"These rejections and Smith's acquiescence are not without substantial weight. Even if it can be said that no definite limitation is thereby imposed, they certainly furnish light in determining what method or series of steps are defined in claim 1. *If claim 1, as originally presented, had been allowed, Smith might claim the con-*

struction now asserted, but perhaps at the risk of validity. If amended claim 2 had been allowed, Smith would be entitled to the construction now contended for, except only for the limitation of a predetermined speed or velocity. In the claim first submitted, he was seeking a claim covering eggs arranged in a column in various stages of incubation, with merely heated air forced or impelled about the eggs. In the later claim, he was seeking to cover eggs in one chamber in various stages of incubation, with heated air driven about all the eggs, plus a predetermined speed or velocity for the air. These claims were all rejected by the examiner, either because they were anticipated by the prior art, or because they *covered more* than Smith had actually discovered or invented. *He acquiesced in that rejection and accepted narrower claims.*

"Smith is not now entitled to have a construction which covers merely eggs in different stages of incubation in one chamber, with heated air applied to or forced about them. He made an effort to get claims broad enough to admit of this construction, and failed. He acquiesced in that rejection and accepted claims which called for the application of a current of air. This expression, whether we consider merely its normal meaning, or whether we determine its meaning from the disclosures of the specifications, or whether we determine the same from these repeated Patent Office rejections, must be held limited to a method which calls for the creation and driving by force of a current of air in some more or less definite or predetermined direction through a column of eggs arranged in an order which presents first to the current those in the most advanced stage. In my opinion, defendant has not appropriated this ele-

ment or step of claim 1, and is not guilty of infringement."

Judge Westenhaver then thereafter referred to three prior adjudications of the Smith patent, wherein these same claims were in issue, to-wit: His own decision in the Wolf case, the decision of Judge Hickenlooper in the Petersime case, and the decision of the Circuit Court of Appeals for the Third Circuit in the Cooley case, 17 F. R. (2nd) 453, wherein similar views to his own in the Blum case had been expressed as to the nature of the Smith invention, and he quoted from the said decision of the C. C. A. for the Third Circuit in the Cooley case, wherein that court, by Judge Woolley, after pointing out what Milo Hastings had done, described Smith's hatching method as follows:

> "He (Smith), too, set eggs in trays, arranged in tiers and enclosed them in a chamber, and he also provided artificially heated air by a motor-driven fan positioned at the top of the chamber, but he established an *air current and regulated its direction* by arranging the tiers of trays in two columns parallel with and separated from each other so as to form between them a central corridor, and placed *partitions or curtains* from the top to a short distance from the bottom of the tiers and *directed* the air current downwardly not through the eggs, but through the corridor where it mushroomed on the floor, spread beneath the tiers, ascended through the egg trays and escaped through definitely arranged air outlets. *By so controlling the current of heated air,* Smith claims, and we think correctly, that he is enabled to attain uniformity of temperature in its movement."

Then, shortly thereafter Judge Westenhaver ends up his decision with sentences which read as follows:

"That three different tribunals in different situations should be so impressed, is strong evidence of the soundness of my present conclusion."

* * * * * * * * *

"I still think that defendant's (machine) has many limitations and disadvantages. Be that, however, as it may, its method is not Smith's invention nor the method called for by the words in claim 1 'applying a current of air.' Even if Smith's invention is one of great merit, and his patent claims entitled to a liberal arrangement of equivalents, *it is not permissible* to give those claims a construction broad enough to include a method which does not use or apply *his current of air.*

"For the foregoing reasons, plaintiffs' bill will be dismissed at their costs."

From the above it will be seen that Judge Westenhaver in the Blum case took the same view of claim 1 of the Smith patent in suit as did the Circuit Court of Appeals for the Eighth Circuit in the instant case and as did the Circuit Court of Appeals for the Sixth Circuit in the Petersime case.

The Circuit Court of Appeals for the Sixth Circuit in the Blum case affirmed the decision of the trial court in a very short decision which, because of its importance, is here quoted (with the exception of the introductory paragraph). This decision is reported in 27 F. R. (2) 333.

"Counsel for appellant frankly concede that there should be an affirmance, unless we are prepared to modify to some extent our holding in the Petersime case. In that opinion some acceptance was given to the theory that there is no infringement, unless the circulating air strikes first those eggs which are in the last stages of incubation and are generating the greatest heat. In

considering a construction where the main current of air is brought in from outside, and in thinking of only the first circuit which this air makes, that thought seems applicable.

"Counsel now point out, with much force, that in a case where the air does not come in from the outside in large volume, and that in any case during the circuits after the first one, no one point in the circuit gets the air ahead of any other point, in an absolute way. Which point gets it first depends upon where we consider the circuit to begin. *We think we need not consider the effect of this defect in the reasoning—if it is a defect—of our former opinion.* The result in that case rests also upon the theory that the patent contemplates a distinct, or at least an identifiable, current of air, flowing like a stream in one direction. Upon reconsideration, we are satisfied that this theory is correct. Whether there is such a fairly distinct current, as distinguished from the general agitation employed by the defendant here, and in less degree by the defendant in the Petersime case, is said to be of no practical importance in achieving the successful result. Perhaps so; and yet dependence upon that theory, in order to sustain the patent, is required, *both by the proceedings in the Patent Office and by the prior art, including Smith's too old public use.* Smith learned or knew he must differentiate in this respect in order to get his patent.

"The decree below is affirmed."

The decision by the Sixth Circuit Court of Appeals in the Blum case (above quoted) is one of the decisions alleged to be in conflict with the decision by the Circuit Court of Appeals in the Eighth Circuit in the instant case. From a

consideration of the above decision in the Blum case, it will be seen that the C. C. A. for the Sixth Circuit did not take the position that claim 1 of the patent was not limited to the movement of the air first to the eggs in the advanced stage of incubation and then to the eggs in the less advanced stage. It avoided passing on this question, merely stating, "We think we need not consider the effect of this defect in the reasoning—if it is a defect—of our former opinion." The Court then went on to base its decision on the grounds that the patent contemplates a distinct or at least an identifiable current of air, flowing like a stream in one direction, and held that in the Blum machine there was no such current. The Circuit Court of Appeals in the instant Snow case used as one of the grounds for finding non-infringement of claim 1 that the respondent Snow did not have the current of the patent claim. We quote from the Eighth Circuit Court of Appeals decision in the instant case, 70 F. R. (2) 564, page 568:

> "The conception and operation of appellee's device is a *column of air* passing through the column of eggs in a definite direction—from eggs in advanced stages to those less advanced. In appellants' device, the conception and operation is a *wide, general diffusion of air kept* moving around all of the eggs without relation—as to direction—to the location of eggs in the particular stages of incubation.
>
> "Thus differing in both essentials of the patent—arrangement of eggs and *air current*—from the device disclosed by the patent, appellants' device is not infringing."

In other words, the decision of the Circuit Court of Appeals for the Sixth Circuit in the Blum case is in accord with

the decision of the Circuit Court of Appeals for the Eighth Circuit in the instant case. It is also in accord and not in conflict with its own prior decision in the Petersime case.

The Hillpot Case.

The title of this case before the District Court for the District of New Jersey is *Buckeye Incubator Co., et al., vs. Hillpot.* The decision, written by Judge Bodine, was dated Aug. 4, 1927, and in said decision, claims 1 and 2 of the Smith patent 1,262,860, were declared non-infringed. This decision is reported in 22 F. R. (2) 855.

The title of this case before the Circuit Court of Appeals for the Third Circuit on appeal, is *Buckeye Incubator Co., et al., vs. Hillpot; Hillpot vs. Buckeye Incubator Co., et al.* It was heard before Circuit Judges Buffington, Woolley and Davis. The opinion was written by Judge Woolley and was rendered Feb. 10, 1928, nearly five months before the decision by the Circuit Court of Appeals of the Sixth Circuit in the Blum case. It is reported in 24 F. R. (2) 341. The trial court was affirmed.

Claims 1 and 2 of the Smith patent 1,262,860 here in suit were in issue. Hillpot brought a counterclaim against the plaintiffs for infringement of certain claims of patents owned by Hillpot. The discussion as to the counterclaim may be disregarded.

In the District Court decision, Judge Bodine, after calling attention to the prior decisions on the Smith patent, held that the file-wrapper record of the Smith patent limited the meaning of claim 1 to the passing of air currents through the eggs in columns in a given direction from the eggs in the more advanced stages of incubation to those in the less advanced stages. He also pointed out that stage incubation

as disclosed in the Winkler patent 286,756 of Oct. 16, 1883, was old and it was only for a very specific interpretation that Smith could maintain his patent, and that his method could not be broadened either beyond that of his machine shown or the claims made. As before stated, the process claims of the Smith patent were held not infringed by Hillpot.

In the Hillpot case before the Circuit Court of Appeals, 24 F. R. (2) 341, the Hillpot machine and its operation were described on page 343 of the reported decision, as follows, to-wit:

> "The respondent practiced three methods which may best be stated by describing the apparatus in which he pursued them. All had closed chambers, egg trays arranged in tiers and the tiers positioned apart with a corridor between, restricted openings for the escape of foul air, and motor-driven fans in close relation to coils of heated pipe. All this was Smith; *and it was what Smith had taken from the art.* Hillpot then adopted that one of *several prior art practices* of arranging eggs 'at different levels' in stage incubation by beginning at the top with trays of fresh cool eggs, and moving them down as, from day to day, incubation progressed and self-heat developed, and then filling their places with trays of fresh cool eggs until, when the tier was completed, the eggs in the bottom trays were in the more advanced stage of incubation and those in the top trays in the less advanced stage; that is, he had eggs variously positioned with varying temperatures, presenting the problem which confronted Smith when he made his invention. Hillpot then departed from Smith's preferred apparatus and method which, as disclosed in the specification, shown in the diagram and claimed in claim 4,

have the heating coils and motor-driven fan positioned in the corridor near the ceiling, with the result that heated air is driven down the corridor to the floor where it mushrooms and ascends first through the warm eggs and then through the cool eggs *when they are arranged in that order.* Hillpot in one structure placed the heating coils and fan in the corridor at the bottom of the chamber, in another in the corridor at the side of the chamber midway between the floor and ceiling, and in the third in the corridor near the top with superimposed baffle plates so that, in each instance (we shall assume), a column of heated air was driven to the top, there it mushroomed and descended through the two tiers, first through the trays of cool eggs and last through the trays of warm eggs, when they were so arranged. *If the Hillpot structures were in all other respects like the apparatus of Smith,* it will be observed that the air movement which Hillpot obtained by differently positioning the fans is a *precise reversal* of Smith's air movement."

From the above, it will be noted that the Hillpot machine was almost identical with the Smith machine with the exception that in the Hillpot machine, Hillpot placed his heating coils in slightly different position in the corridor and drove the air upwardly from his fans so that the air moved first to the eggs in the less advanced stages of incubation instead of first to the eggs in the most advanced stage of incubation. It will be noted that Hillpot used the shifting and grouped type of stage incubation of Smith where fresh eggs were set at the tops of the egg tiers and moved successively downwardly from day to day. There is, however, one very important difference between the construction and operation of the Hillpot machine and the construction and operation of

the Smith machine. Hillpot used no curtains or corresponding partitions between the corridor of his machine and the egg tiers. He did not confine the circulation of the air as did Smith by means of curtains or corridors. Attention is here called to the fact that, as will appear later in this brief in Chapter IV thereof entitled "Non-infringement," respondent does not use curtains or equivalent partitions between the corridor and the egg tiers in his machine. There are also many other distinguishing features, as will appear later, which make it clear that respondent's hatching method is much more remote from the Smith hatching method than was the Hillpot hatching method from the Smith hatching method.

Immediately after quoting claim 1 of the Smith patent, and emphasizing certain portions thereof by Italics, the Court states, page 342 of its decision:

> "The closed chamber was old; placing eggs in mesh bottom trays, stacking the trays in tiers, separating the tiers by passageways and arranging the trays at different levels of incubation, called stage incubation, were old; heat distribution effected by fan-driven heated air was old; and openings in the closed chamber for the escape of foul air (though not purposely restricted) were old."

Then going on, the Court said:

> "In the Cooley case, we found, as did both Courts in the Wolf case, that Smith got away from the old art and conceived a new method and provided a new apparatus, whereby heated air, instead of being driven hither and yon throughout the closed chamber, is driven *in currents* and made to circulate in the form of *columns of air in predetermined paths through columns of trays contain-*

ing eggs, which, at different stages of incubation, have different temperatures and which, therefore, exact different treatment, with the result that he met the demands of eggs of varying temperatures and supplied them with the temperature having a uniformity which all workers in the art had sought and which the hen alone affords to best advantage in nature. *If Smith did not do this, he did nothing."*

THE FALLACIOUS DICTUM IN THE HILLPOT CASE. On pages 344 to 345 of the reported decision, in the Hillpot C. C. A. case, the Court states:

"In Smith, after the air enters, there is no quick exit. The first requisite is a closed chamber and from this chamber no air, except foul air, escapes; the main body is retained in the chamber and is moved in cycles through the corridor and egg columns around and around, on and on, without any defined end. * * *

"But when, as in Smith, the air moves in cycles through corridors and tiers it makes no difference *after the first cycle* which way it moves through the egg trays, whether from bottom to top or from top to bottom, or whether it first strikes warm eggs or first strikes cool eggs, for in *every cycle after the first* the current when passing warm eggs will gather up their heat units and carry them to the cool eggs precisely as claimed and will in the same way produce that uniformity of temperature which is the thing sought by the art and achieved by the invention.

"But the issue of infringement in this case does *not turn in law* on such an interpretation of the claims alone or in fact on what, as thus far stated, seems a mere reversal of the steps of the patented method. It

turns on another fact, until now *purposely omitted,* and on its *consequent air movement."*

The above quoted statement is fallacious. In the first place, what is said in regard to it making no difference whether the air strikes the warm eggs first or the cool eggs first is obviously mere dictum. It was not essential to or used in the determination of the issues in that Hillpot case; and that fact was so stated by the Court, itself, in the last above quoted sentence.

In the next place, with all due respect to Judge Woolley, the statement is without foundation in fact. Judge Woolley states that the first requisite is a closed chamber and from this chamber no air except foul air escapes. The patent does not disclose a completely closed chamber. Smith's chamber has both fresh air inlets and used air outlets. No air could escape from the chamber without letting fresh air in to take its places. A completely closed chamber cannot be used for carrying out the Smith process for no fresh air could be introduced to vitalize the air moving to the eggs in a completely closed chamber. It is clear that Judge Woolley did not understand the importance of the air being vitalized before reaching the eggs in the advanced stages in accordance with the Smith method. At the commencement of every cycle of air movement in the disclosed Smith hatching method, fresh air and moisture is mixed in large quantity with that portion of the old air that is recirculated and this fresh air and moisture vitalizes all the air that is moved by the fans downwardly to the confining corridor and thence to the eggs in the most advanced stage of incubation in the lower portions of the egg tray tiers. This is for the particular purpose of carrying off the heat from the eggs in the more advanced stage of incubation; for carrying away the

carbon dioxide therefrom; and for supplying those eggs with the needed moisture and oxygen to prevent the chicks from dying *in embryo.* This has previously all been fully brought out in Chapter III, Section 1, of this brief, under the heading "The Patent Discloses that the Air is Never Recirculated in Closed Cycles—No Air is ever Recirculated in the Same Condition."

Immediately following the above mentioned fallacious dictum, the Court in the Hillpot case said:

> "Looking for the invention by reading the claims in the light of the specification and the file-wrapper history of the patent prosecution, one fixed and definite thing is disclosed, first, with reference to its presence in the apparatus and next with reference to its use in the methods. That is a 'corridor' between tray tiers, *and a corridor of a kind defined by its purpose.* The specification describes this by saying:
>
> > 'The invention comprises a walled chamber * * * subdivided longitudinally by two parallel rows of curtains 3 and 4 to provide a central compartment or corridor 5 and said (side) compartments 6 and 7' (tray tiers).
>
> "This physical arrangement is provided specifically to perform the function of *maintaining and directing the air current created by the motor-driven fan.* Without such an arrangement the air would *go where it pleased.* With such an arrangement the air, confined in a corridor partitioned from the tray tiers by curtains, will move in a *current or column* to the point of outlet which usually is at the bottom of the corridor, when, after mushrooming, it will pass below the tiers and ascend through the egg trays in a *current or column* because it is confined there by the same curtains that first pre-

vented its escape from the corridor. *The essence of the invention therefore is forced circulation of heated air in predetermined direction, or, stated differently, forced circulation of columns of heated air through columns of eggs.* There can be little doubt about that."

Then the Court next refers to the file-wrapper record of the Smith patent, and in relation thereto, makes the following statement on page 344 of the reported decision:

"The file wrapper clearly shows that Smith was forced at different stages of the patent prosecution so to limit his claims. Moreover, the file wrapper points to the fact that the 'curtains' make 'a tight closure between the corridor and the compartments'; it speaks of air passageways and vertically directed current; it contains ten references to 'forced circulation of heated air,' six to circulation effected by 'currents' of heated air, six to 'columns of heated air' through 'columns of egg trays,' and it contains *no reference* to any other kind of air circulation. Yielding to the demand of the Patent Office that the 'circulation of air should be included and defined,' Smith *acquiesced* in repeated rejections of his claims, proposed others and finally accepted those allowed, in each of which is embodied the conception of air movement by currents in defined channels. Turning to the specifications for light upon the claims, we find nothing there suggested in respect to air movement except by currents in predetermined directions."

The Court then concludes its decision by the following statements appearing on pages 344 and 345 of the reported decision:

"Turning to the specifications for light upon the claims, we find nothing there suggested in respect to air

movement except by *currents in predetermined directions.* With all this before him what did Hillpot do? He simply *omitted curtains.* He thus transformed the corridor of Smith into the passageway of the old art. Will this passageway without curtains sustain and direct the air current as it comes from the fan? Hillpot says it will not, and, what is more important, Smith does not say it will. With the Smith central idea of means and function for maintaining and directing an air current out of the Hillpot structures, Smith maintains that the true meaning of the 'current of heated air' as employed in the patent claims is merely a current 'created * * * with sufficient velocity to circulate, diffuse and maintain the air throughout the chamber' and urges that with the curtains off, the air in Hillpot is so diffused, generally and laterally, that it strikes each of the eggs again and again, and in doing so, it picks up some of the heat units from the warm eggs and carries them to the cool eggs, thereby effecting the desired uniformity of temperature. (It may be observed that it also carries them to other warm eggs.) In a word, he says that air '*agitation*' is the *essence* of his invention, yet *nowhere* in the file wrapper, specification or claims of the patent do we find *any reference to air agitation.* This silence, we surmise, is due to the fact that air agitation in the sense of indefinite circulation, diffusion, or churning was *prior art.* On circulation by defined currents alone Smith was awarded the patent. We cannot find circulation of that kind in any of the Hillpot structures. With curtains off, the tiers of trays present comb fronts to the passageway. When the warm air leaves the fan there is for a moment and for for a short distance a current, but as the force weakens

the current fades, and the body of heated air does not go to the opposite wall and mushroom but wanders in between each of the scores of trays and *goes where it pleases.* Instead of one *strong current moving* in one direction in *trunk form,* Hillpot has a trunk current only on leaving the fan; then it divides into a multitude of branches which follow no defined courses but only courses made by the least resistance. We are constrained to find that Hillpot did not infringe the claims of the Smith patent in suit.

"* * * The decree of the District Court is affirmed."

The decision of the Circuit Court of Appeals for the Third Circuit in the Hillpot case is one of the decisions alleged by petitioner to be in conflict with the decision of the Circuit Court of Appeals for the Eighth Circuit in the instant case. As has been previously pointed out, the Circuit Court of Appeals for the Eighth Circuit in the instant case held claim 1 of the Smith patent limited not only in respect to the passage of the air first to the eggs in the advanced stage of incubation and then to the eggs in the less advanced stage, but it also held the claim limited to the circulation of air by a current *moving in a column* through the egg trays. It is clear that the C. C. A. for the Third Circuit in the Hillpot case based its decision of non-infringement on one of the same identical grounds as did the C. C. A. for the Eighth Circuit in the instant case. It held the claim limited to the circulation of air by a current moving in a column through the egg trays. Although the C. C. A. for the Third Circuit is in disagreement with the C. C. A. for the Eighth Circuit as to whether or not claim 1 of the patent is limited in respect to the passage of the air first to the eggs in the more

advanced stage of incubation and then to the eggs in the less advanced stage, it will be seen that there is no conflict between the two decisions in the two different Circuits which makes any controlling difference for the determination of the question of infringement in the instant case.

In some respects the claim of the Smith patent is more narrowly interpreted in the C. C. A. decision of the Hillpot case than in any other decision involving the patent. It is made clear from the Hillpot decision that the only novelty in the Smith invention lies in the curtains which are used to confine and direct the air stream and to control the current movement of the air in the Smith process. The Hillpot case is to the effect that method claim 1 of the patent cannot be infringed if in a machine identically like that shown in the Smith patent, the curtains are eliminated. As this Hillpot case holds that claim 1 of the patent is limited to a current moving in a column through egg trays, the decision is also to the effect that the claim cannot be infringed by use of a machine wherein the circulation of air is chiefly in a horizontal direction, not in columnar form. Petitioner, in his brief, attempts to make it appear that the Hillpot case supports the view that the claim is open to an interpretation broad enough to cover merely stage incubation and forced draft. This is absurdly false. How far from the truth of the matter this contention is, will be fully appreciated when the Hillpot decision is fully understood.

The Waxham Case.

The title of this case before the Circuit Court of Appeals for the Ninth Circuit is *Waxham vs. Smith, et al.* The hearing was before Circuit Judges Wilbur, Sawtelle and Garrecht. The opinion was written by Judge Wilbur and was

rendered April 9, 1934. It is reported in 70 F. R. (2) 457.

Inasmuch as the Waxham case is now before this Court, on writ of certiorari to the Ninth Circuit, and as the hearing on the Waxham case is set concurrently with the instant case, very little need be said about the same.

The Court in the Waxham case did not attempt to determine the meaning of claim 1 of the Smith patent, as appears from the following quotation taken from page 459 of the reported decision:

> "In view of the decisions above referred to interpreting the Smith patent, we deem it *unnecessary* to further discuss either the nature or character of the invention or to describe the method of incubation covered by the Smith patent or *to attempt to define the limitations placed upon the patent* by these decisions which in that regard are not entirely consistent."

After quoting from the Robbins patent and pointing out the fact that the Robbins patent incorrectly described the air circulation in the incubator there disclosed, *i. e.*, an incubator similar to that used by Waxham, the Court, page 460, of the reported decision, made the following statement:

> "There is a definite and continuous current of air utilized in the Waxham device moving at a velocity not materially different from the speed of the air current in the Smith patent and accomplishing substantially the same purpose."

Whether the last above quoted statement is correct or not, we will not attempt to say, inasmuch as it does not concern us here. Attention is called to the fact, however, that the Circuit Court of Appeals for the Ninth Circuit had no opportunity to inspect the Robbins incubator in operation at the hearing to determine from its own observation the air cir-

culation in that machine. Whatever may be the air circulation in the Robbins machine used by Waxham, it is clear that there is no current in the Snow machine such as the current stated by the Court to have been present in the Robbins machine. At the hearing before the Circuit Court of Appeals for the Eighth Circuit in the instant case, one of respondents' incubators was set up and operated along side of one of the Smith commercial machines in the court room at St. Louis, Missouri, and the Court, after observing the operation of the two machines, *found as a fact* that there was no general current movement in respondents' machine. 70 F. R. (2) 564, p. 568.

> "In appellant's device, the conception and operation is a wide, general diffusion of air kept moving around all of the eggs without relation—as to direction—to the location of eggs in particular stages of incubation."

That in respondents' machine there is no general current movement of air of the type stated by the Ninth C. C. A. to be found in the Robbins machine, will more fully appear in Chapter IV of this brief under the heading "Non-Infringement."

The decision of the Circuit Court of Appeals for the Ninth Circuit was undoubtedly greatly influenced by the conclusion of that Court that in the Robbins machine there was the same type of current movement as in the Smith patent. The Ninth C. C. A. in the Waxham case, however, stands alone in its broad interpretation of claim 1 of the Smith patent. Its interpretation of claim 1 of the Smith patent is contrary to the interpretations given that claim by the C. C. A. Eighth in the instant case and by the C. C. A. Sixth in the Petersime and Blum cases and by the C. C. A. Third in the Hillpot case. It is an erroneous interpretation.

The statement made by the Circuit Court of Appeals for

the Ninth Circuit, on p. 460 of the reported decision, to the effect that the way in which the eggs were set and handled in the Robbins incubator was immaterial, is an incorrect and groundless statement. Smith's method for hatching eggs requires the eggs to be set and handled within the incubator as stated in the specification of the Smith patent; and this matter has been made clear in the previous portions of this brief and is emphasized in the decision of the Circuit Court of Appeals for the Eighth Circuit in the instant or Snow case.

When this obvious error in the decision of the Ninth Circuit Court of Appeals in the Waxham case is corrected, it is obvious that the holding of infringement in the Waxham case must be reversed.

The Court in the Waxham case could not have understood the effect of the large amount of fresh and moistened air admitted at the beginning of each cycle of air movement, in accordance with the Smith disclosure, to vitalize the air moving first to the eggs in the advanced stages of incubation. It also could not have understood the purpose or importance of the curtains in confining the air to compel it to take only a current movement in columns through the egg trays, as brought out most clearly in the Hillpot case. The importance of the curtains to carry the vitalized air first to the eggs in advanced stages and then to the eggs in the less advanced stages, so that when the type of incubation disclosed by Smith is used, adequate moisture and oxygen would be furnished to the eggs in the advanced stages and the heat and carbon dioxide driven off therefrom was not appreciated by the Court in the Waxham case. The Court did not consider or appreciate the limitations imposed on the Smith patent by the disclosure on the face of the patent or by the estoppels arising from the file-wrapper record, or by the

prior art. The decision in the Waxham case was in the teeth of all prior adjudications by Circuit Courts of Appeal wherein any careful effort was made to determine the true meaning and scope of claim 1 of the Smith patent.

Conclusion as to the True Meaning of Relied on Claim of the Smith Patent in Suit.

From the above, it will be seen that the patent disclosure, Smith's own prior public usage during the years 1913 and 1914, the prior patents and publications and the estoppels arising from the file-wrapper record, independently and co-operatively confine claim 1 of the Smith patent in suit to the restricted and limited meaning accorded thereto in the instant case by the Circuit Court of Appeals for the Eighth Circuit. All prior adjudications reaching Circuit Courts of Appeals, with the exception of the Waxham case, accorded claim 1 of the patent a meaning consistent with the meaning accorded thereto by the C. C. A. for the Eighth Circuit in the instant case. Of the cases reaching the Circuit Courts of Appeals and wherein careful effort was made by the Courts to determine the meaning and scope of claim 1 of the patent, each Court, other than the C. C. A. for the Ninth Circuit, held the claim limited in one or more of the same ways the claim was held limited by the C. C. A. for the Eighth Circuit in the instant case. The Circuit Court of Appeals for the Ninth Circuit in the Waxham case is obviously in error as to the meaning accorded to claim 1 of the Smith patent therein.

CHAPTER IV.

ARGUMENT CONTINUED.

NON-INFRINGEMENT.

Having made clear in Chapter III of this brief the true meaning and scope of the relied on claim 1 of the Smith patent in suit, if said claim can be treated as valid (which we deny), we are ready to consider the question of infringement.

Petitioner must admit that respondents do not infringe the claim, if this Court agrees with respondents' contentions that claim 1 of the patent is limited in any one of the respects specified in the paragraphs numbered 2, 3, 4, 5 and 6 appearing on pages 7-8 of this brief, under the heading, "Chapter II—Summary of Argument."

As to the structure of respondents' incubator and the method of hatching eggs carried out therein, there is agreement between respondents and petitioner in the following respects:

In respondents' hatching method, there is no movement of a column of air through a column of eggs. This is admitted by petitioner (p. 15 of petitioner's brief). Hence, if this Court agrees with the C. C. A. Eighth in the instant case and with the C. C. A. Third, in the Hillpot case, that claim 1 of the patent is limited to a method of hatching eggs wherein a column of air is caused to move through a column of eggs, there can be no infringement of the claim by respondents.

In respondents' hatching method, eggs at different stages of incubation are indiscriminately mixed throughout the incubating chamber so that the eggs in the advanced stages of incubation are not grouped together and the eggs in the

less advanced stages are not grouped together, but on the contrary, the eggs in the advanced stages are "sandwiched" between the eggs in the less advanced stages and vice versa. The eggs after once being set in the incubator are never shifted or moved from one position to another in the incubating chamber until they are ready to hatch. This is admitted by petitioner (see p. 13 of petitioner's brief). Hence, if this Court agrees with the C. C. A. Eighth in the instant case, that the claim is limited to cover only a hatching method wherein a special type of stage incubation is used including the shifting of eggs from one position to another successively as the incubation of the eggs progresses or that the claim is limited to cover only a hatching method wherein a special type of stage incubation is used including grouping or locating the eggs in the earlier stages of incubation together in one portion of an incubating chamber and grouping or locating the eggs in the later stages of incubation together in another portion of the same chamber, there can be no infringement of the claim by respondents.

In respondents' hatching method, no curtains or equivalent partitions are used. This is admitted by petitioner (pp. 53 and 55 of petitioner's brief). Accordingly, in respondents' method, air circulated in a chamber containing eggs is not confined to travel in definite paths by means of curtains or equivalent partitions. Hence, if this Court agrees with the C. C. A. Third in the Hillpot case, that the claim is limited to cover only a hatching method wherein air circulated in a chamber containing eggs is confined to travel in definite paths by means of curtains or equivalent partitions, there can be no infringement of the claim by respondents.

In respondents' hatching method, there is no movement of the air first to the eggs in the advanced stage of incubation and thence to those in the less advanced stage of in-

cubation. This fact is not denied in the petitioner's brief and it is practically admitted by what is there said on pages 13 and 24 as to the way in which respondents set and hatch eggs. Hence, if this Court agrees with the C. C. A. Eighth in the instant case and with the C. C. A. Sixth in the Petersime case and with the District Court in the Blum case (not overruled by the C. C. A. Sixth in the Blum case), that the claim is limited to a hatching method wherein the air is caused to circulate first to the eggs in the advanced stage of incubation and thence to the eggs in the earlier stage of incubation, there can be no infringement of the claim by respondents.

Although the Circuit Court of Appeals for the Eighth Circuit in the instant case found as a *fact* that in respondents' device, there "is a wide general diffusion of air kept moving around all of the eggs * * *" and thereby the said Court distinguished the air circulation in respondents' machine from an air circulation in general current form, petitioner still contends (page 37 of petitioner's brief and elsewhere) that the air in respondents' machine moves in general current form through definite channels or paths. Respondents contend that in their incubator the air does not circulate in general current form. There is a general mixing, churning, agitating and diffusing movement of the air in respondents' machine.

The controversy as to whether or not the air moves in general current form within respondents' machine is highly important for the reason that claim 1 of the Smith patent is clearly limited to a method of hatching eggs wherein air in a general current form is caused to circulate within a chamber containing eggs. The claim has been so held limited by the C. C. A. Eighth in the instant case, the C. C. A. Sixth in both the Petersime case and the Blum case, the C.

C. A. Third in the Hillpot case and even the C. C. A. Ninth in the Waxham case.

It, therefore, becomes highly necessary for this Court to correctly understand the construction and operation of respondents' incubator, so that this Court can determine for itself whether or not respondents escape infringement of claim 1 of the Smith patent on the sole ground that respondents do not utilize a current of air of the type specified in the claim.

Some Matters Requiring Advance Consideration for Properly Weighing the Testimony.

Preliminary to the consideration in detail of the construction and operation of respondents' incubator, certain matters should be called to the Court's attention in order to enable the Court to properly weigh the testimony.

a. *Tests of the Machines in Question by the Respective Parties to the Suit.*

Directly prior to the trial of this case before the U. S. District Court, the respondents, pursuant to written notice to petitioner's counsel, made careful tests at Minneapolis, Minnesota, of a commercial specimen of the machine of the Smith patent in suit, and of a commercial machine of the respondents' manufacture called the "Snow" machine. The machines were both introduced into evidence, the respondents' Snow machine being marked "Defendants' Exhibit F," and the Smith machine being marked as "Defendants' Exhibit H."

At the said tests of said two machines, the petitioner's counsel, Mr. Albert L. Ely and the petitioner's assistant

general manager and alleged expert, Mr. Taggart, were present. The tests were conducted under the supervision of Professor Frank B. Rowley, the respondents' expert, and after the tests supervised by said Rowley were completed, petitioner's counsel and expert were invited to make whatever further tests they desired on the said machines, but they did not make any.

The tests made by respondents at that time were, therefore, *inter partes* tests, fairly made, in the presence of counsel for petitioner and his expert. Test data sheets showing the results of these tests are in evidence on behalf of the respondents as "Defendants' Exhibits J-1 and J-2" Diagrams of Rowley's test of the Smith machine (R. 557-560), and "Defendants' Exhibits M-1 to M-7" Diagrams of Rowley's test data of Snow machine (R. 571-584).

The said machines "Defendants' Exhibits F and G" were also shown to the District Court during the trial of the case. They were also taken to St. Louis, at the hearing before the Circuit Court of Appeals and were set up and operated in the court room of said Court at St. Louis, Mo., in the presence of the Judges thereof. Offer has been made to this Court to bring these said machine exhibits to Washington, set them up and operate and demonstrate them to this Court at a convenient location. Respondents will be very glad to do this, at any time, at the Court's pleasure.

Petitioner, at the trial of the case, also introduced into evidence two incubators, one of which "Plaintiff's Exhibit 16" was a commercial specimen of petitioner's machine but the other of which was an incubator, not made by respondents, but made by petitioner, and alleged to be of the same construction and operation as the incubators made and used by respondents. This latter machine was introduced as "Plaintiff's Exhibit 17" and was called "Plaintiff's model

of Snow machine." No opportunity was given respondents to make tests on the machines introduced into evidence on behalf of petitioner, and although the said machines were shown to the Court at the trial of the case, petitioner never made any tests on the said machines within the jurisdiction of the trial court or in the presence of respondents or their counsel or expert.

Petitioner, however, put into evidence as "Plaintiff's Exhibits 12 to 12KK" (R. 473-493) an elaborate set of test data made during several months' time in unnoticed *ex parte* tests by petitioner's expert, Mr. Taggart, on the alleged reproduction of respondents' machine, "Plaintiff's Exhibit 17," manufactured by petitioner. This test data was put in evidence in an attempt to show the air circulation in the incubator used by respondents and alleged to infringe the patent. In addition to this, petitioner also put into evidence as "Plaintiff's Exhibits 13 to 13KK" (R. 495-511) a number of test data sheets corresponding to most of the sheets introduced as "Plaintiff's Exhibits 12 to 12KK" but colored in an effort to convince the Court of a general current movement in respondents' incubator. Then petitioner also introduced into evidence a colored celluloid model, "Plaintiff's Exhibit 14," wherein celluloid sheets colored after the manner of "Plaintiff's Exhibits 13 to 13KK," were put in place within a small sized box alleged to represent respondents' machine. All of the said "Plaintiff's Exhibits 12 to 12KK, 13 to 13KK, and 14" were therefore based on *ex parte* tests made by petitioner's expert, Mr. Taggart, on the machine "Plaintiff's Exhibit 17," built and manufactured by petitioner but alleged to be made in accordance with respondents' machine. When Mr. Taggart, under cross examination (R. 409), was asked why he did not make the tests of plaintiff's model of the Snow machine within the jurisdiction

of the Court and invite respondent and his counsel to be present, Mr. Taggart replied:

> "A. That has not been our custom. It is not the practice of the attorney in charge of the matter. *We* prepared our data. *We* brought our data here. *We* brought the machine here. I have testified to making the tests and I have had the Court there to show him how the tests were made.
>
> The Court: In other words, that was the way you wanted to do it.
>
> The Witness: Yes, sir."

In view of the *ex parte* character of all the tests of said machine, "Plaintiff's Exhibit 17," made by petitioner, it is respectfully submitted that none of the exhibits, "Plaintiff's Exhibits 12 to 12KK, 13 to 13KK and 14," and none of the testimony regarding the same, introduced into evidence on behalf of petitioner, in an attempt to show the air circulation in respondents' machine, are entitled to any weight whatsoever, except where corroborated.

The courts have so held in a long line of decisions, of which those hereinbelow identified are sufficient for purposes of illustration.

> *Plunger Elevator Co. vs. Standard Plunger Elevator Co.*, C. C. A. 1st, December 4, 1908, 165 F. R. 906, 911.

On page 911, near top of the reported decision in that case, said C. C. A. made the following statement, to-wit:

> "The evidence that the defendant's pilot valves are so throttled as necessarily to cause a slow stop of the elevator is unsatisfactory. *We disregard altogether the report of tests made* apparently by a skilled operator, *some of them in the absence of the complainant* * * *."

Bemis, et al., vs. Charles A. Stevens & Bros., C. C. N. D., Ill. (Mar. 24, 1910), 177 F. R. 717.

The patent in suit was for a station terminal in a pneumatic dispatch tube system and the plaintiff put in some *ex parte* tests, and, respecting this matter, the trial court, Circuit Judge Kolstadt, made the following statements, to-wit:

> "I give *no weight* to complainant's experiments *made in the absence of defendants.* Such attempts at *making* evidence are not to be encouraged."

Kuehmsted vs. Farbenfabriken of Elberfeld Co., C. C. A. 7th, May 11, 1910, 179 F. R. 701-707.

That Court, on page 707 of the reported decision, said:

> "Courts place little weight on *ex parte* demonstrations in any case."

Permutit Co. vs. Harvey Laundry Co., et al., D. C. W. D., N. Y. (June 16, 1921), 274 F. R. 937.

The suit was brought under the Gans patent, 1,195,923, for a water softening apparatus. On page 945 of the decision, appear the following statements, to-wit:

> "The testimony of experiments by defendants' witnesses Terry and Partridge, included in the record, was not taken before the court. * * * The witnesses were not cross examined, and no notice had been given to plaintiff of the experiments. The cases hold that *ex parte* experiments are usually disregarded by the court." Citing *Bemis vs. Stevens & Bros.*, 177 F. R. 721; *Bethlehem Steel Co. vs. Niles-Bement Pond Elevator*, 166 F. R. 880-888.

Carson vs. American Smelting & Refining Co., C. C. A. 9th (Feb. 16, 1925), 4 F. R. (2) 463, 465-466.

In this case, a patent on a metallurgical furnace was involved and, on pages 465-466, the said Court of Appeals for the Ninth Circuit made the following statements, to-wit:

> "The court below was of the opinion that the practicability of the Siemens' patent was established by the experiments made in the appellee's furnace at Garfield, Utah, after the commencement of litigation over the appellant's patent. The experiments were conducted by the appellee's employees. The chief operator testified that there were strict orders against the presence of visitors and that neither the *appellant nor anyone in his behalf was invited to be present.* Evidence of experiments thus conducted by an interested party, and in the *absence of his adversary* is always received with *suspicion* and is more or less *discredited.*"

The Court then cited *Carnegie Steel Co. vs. Cambria Co.*, 185 U. S. 403, and some of the cases hereinbefore identified.

b. *As to the Two Experts.*

Although Mr. Taggart who made the said *ex parte* tests on the petitioner's manufactured model of respondents' machine, "Plaintiff's Exhibit 17," was introduced as petitioner's expert witness at the trial of the case, his testimony (R. 56 and 120) shows that he was self-interested in the outcome of the suit, being Assistant General Manager of the Smith Incubator Company, petitioner's licensee, and working for said company, or Smith, or both, on a salary and a percentage of the gross profits of the business. His testimony, therefore, should be heavily discounted where uncorroborated.

Respondents' expert, Professor Rowley, on the other hand, had no interest in the litigation. He was a nationally

known, highly educated and experienced mechanical engineer who not only was at the head of experimental engineering at the University of Minnesota, but he also had a large consulting practice. He had specialized on heating and ventilating and at the time of the trial of the case, was President of the American Society of Heating and Ventilating Engineers, a national association, and he had been the Vice President thereof, and Chairman of its Research Committee for a number of years before he became its President (R. 182-183). By his conduct on the stand, Prof. Rowley showed his honesty, frankness and fairness to both parties.

THE STRUCTURE OF RESPONDENTS' INCUBATOR AND THE HATCHING METHOD CARRIED OUT BY THE USE OF THE SAME.

Respondents' machine and the hatching method carried into effect when the said machine is used, has nothing in common with the machine of the Smith patent and the hatching method there disclosed except what was old and common in the prior art.

Verified Description of the Structure of Respondents' Incubator.

Respondents manufactured and used two slightly different types of incubators; but in these two types the only material difference in structure was that, in the earlier type the air in the incubating chamber was heated by steam from steam pipes under thermostatic control and located in the upper part of the corridor of the machine, and in the later type this heating of the air was electrically done by suitable radiators or radiating bars in the form of electrical resistances adapted to be cut into or cut out from an electric

circuit by a thermostat. The hatching method carried out by each machine was and is identically the same.

Photographs of the earlier steam heated machine are in evidence as "Defendants' Exhibits E-1, E-2, E-3" (R. 545, 547-549).

The specimen of respondents' incubator, "Defendants' Exhibit F," introduced into evidence, was one of respondents' electrically heated incubators. Photographs of this said machine marked "Defendants' Exhibits D-1 to D-5," inclusive, are found on pages 535 to 543 of the record. Scale drawings illustrating the structure of the said respondents' machine were introduced into evidence marked "Defendants' Exhibits L-1 to L-5," inclusive (R. 561 to 569).

By reference to the above identified photographs, and scale drawings, it will be seen that the structure of that machine is, in substance, as follows:

A large rectangular casing of greater length than its width or heighth, with an entrance door in its vertical front wall, is employed, and the interior of this casing does not contain any partitions of any kind. In other words, it has only a single large chamber. In this single chamber, are suitably mounted two sets of tiers of superimposed trays spaced apart from each other so as to afford between the same a central corridor always in communication with both sets of tiers of superimposed trays. The two bottom members of each tier of trays are stationary, but all the others are so mounted on supporting chains that they can be tilted so as to stand in horizontal positions when receiving the eggs being set and into inclined positions for turning the eggs at such intervals as desired.

The trays have wire mesh bottoms and those carried by the chains are spaced apart from each other in the vertical plane, so as to afford considerable clearance or space between each

of any two adjacent trays, and these spaces are always in communication with the central corridor.

The said two sets of tiers of superimposed trays are each spaced away from the adjacent side walls of the casing a short distance, as best shown in Fig. 4 of said scale drawings, and in these spaces are mounted agitators for agitating and circulating the air. There are two agitators on each side spaced apart from each other a suitable distance, and also each spaced apart a lesser distance from the end walls of the machine, as can be understood from Fig. 2. The blades of the agitators are carried by horizontal shafts which extend through the side walls of the machine and are provided with driving connections to suitable electric motors, suitably supported at the outside of the respective side walls of the casing, and belted to suitable pulleys on the agitator shafts. The door in the front vertical wall of the casing, as shown in Fig. 1, gives access to the interior of the machine, directly into the corridor between the opposite sets of tiers of trays, and, from the position of a person standing inside the corridor, near the door, and looking rearward, the two agitators at the left would be so rotated that the upper members of the blades would be turning toward the face of that person, or toward the door of the machine, while, on the opposite or right-hand side, the two agitators would be so rotated that the upper members of the blades would be turning away from said person's face, or towards the rear of the machine.

Each of the two side walls of the machine are provided with a series of fresh air inlet holes in zones slightly above the agitator shafts and these holes are covered with box-like covers secured to the walls of the machine and provided with doors at their opposite ends, for controlling the amount of fresh air admitted to the machine. The top wall of the cas-

ing is provided with used air outlets, provided with sliding dampers to vary the size of the discharge openings, at will. In the corridor, near the upper end of the same, a pair of girders or longitudinal wooden bars, extend the entire length of the corridor, and are provided, at suitable intervals with laterally projecting horizontal brackets, which support water-evaporating pans for moistening the air at the same time it is heated. In Fig. 2 of said scale drawings, an additional air-moistening device is shown with its base resting on the floor of the corridor. Directly above the said water-evaporating pans, are located radiating plates, adapted to be connected into or cut out from a switch-controlled electric circuit for heating the air. These radiating plates are shown as supported by brackets depending from the top wall of the casing.

The numerals appearing in two vertical rows on the back wall of the corridor in Fig. 4 of said scale drawings indicate the way in which the eggs are set, at three day intervals, in the usage of the Snow incubator. The numerals 1 show the location of the first setting. The numerals 2 indicate the location of the second setting. The numerals 3 indicate the location of the third setting; and so on, for the fourth, fifth and sixth settings. It will thus be seen that some of the trays occupied by the first setting are sandwiched between other trays which take later settings; and the same remarks apply as to any of the other settings. Still otherwise stated, some of the witnesses said that the different settings are sandwiched. After the settings are once made, the eggs always remain where they are set in the tier until the chicks are ready to hatch. They are never shifted from their set locations.

Mr. Snow described this matter in his testimony (see R. 141-143), and there was offered in evidence a so-called egg-

setting sketch, "Defendants' Exhibit C," made by Mr. Snow (R. 533).

The temperature of the air is thermostatically controlled by a thermostat, which is automatic in its action and keeps the temperature constantly at between 99° and 100° F. The position of the thermostat is shown in Fig. 1 of said scale drawings.

The agitators are so supported that they rotate in vertical planes quite close to the side walls of the casing. As shown in the drawings, these agitators have diameters of about four feet 8½ inches. The blades of these agitators are set at an angle to the plane of rotation.

Mr. E. H. Snow testified that, in the usage of these machines, he aimed to drive the said agitators as nearly as possible, at 200 revolutions per minute (R. 141). He further stated, however, that there was some slippage of the belts; and, hence, that the number of revolutions per minute varied to some extent (R. 152).

There is no dispute between the parties or their expert witnesses as to the structure of the defendants' Snow machines of either the earlier or later types.

The Hatching Method Practiced by Respondents.

Briefly stated, the mode of operation of the Snow incubator, or the method of hatching eggs practiced by respondents, is as follows:

The Snow air-moving means, to-wit: his agitators, rotating in vertical planes, are really *centrifugal stirrers and not true propeller fans, for the reason that they throw off the air centrifugally, tangentially in all directions, chiefly from the tips of the blades,* rather than in axial streams, as do true propeller type fans, such as used in the Smith ma-

chine. The pitch of the blades of the agitators is such that this pitch would normally urge the air to move outwardly from the agitators toward the corridor of the machine. However, the blades of the agitators, because of the smallness of the space, between the same and the side walls of the casing, cannot be fed with sufficient air to supply their demands from their backs. They, unlike true propeller fans, are compelled to get the majority of their feed of air from their fronts or faces looking toward the corridor.

Air is drawn by the agitators, chiefly in horizontal planes, in and through the egg trays toward the side walls of the casing into the eyes or centers of the agitators, at their fronts. At the same time, the agitators draw a certain amount of fresh outside air at their backs into their eyes or centers through the damper-controlled air inlets in the casing. This fresh air is mixed with some old or used air, between the blades of the agitators and the side walls of the casing, prior to its movement into the centers of the agitators. As a result of this peculiar feed, most of the air drawn into the agitators, between the blades of the same, is thrown off centrifugally from the outer ends of the blades to a greater extent than would have been the case, if the blades of the agitators had not been pitched at the angle that they are, relative to the plane of rotation but had been set in planes coincident with their supporting shafts. The centrifugal movement of the air, as it discharges from the agitators, causes the air to move tangentially in all directions, chiefly from the tips of the blades. However, some air is forced by the outer portions of the blades toward the corridor through and in between the egg trays and over and under the egg trays.

The air moved by the agitators is not confined in its movement in any way or by any means within the casing

and it moves freely in all directions to all points therein. Of course, some of the air strikes the walls, top and bottom of the casing, and, as the agitators are moving near the side walls, the air adjacent the side walls, top and bottom of the casing, is highly agitated, thereby preventing cold spots in the casing near the side walls, top and bottom. As one views the two agitators, at the right side of the machine from the front of the corridor, these two agitators revolve in the same direction; and, in the upper zones of their rotation, the blades turn toward the rear of the machine, but, while rotating in the lower zones, said blades turn toward the front of the machine. Between said two agitators, the blades thereof, traveling in adjacent zones, move in opposite directions. As the air moves centrifugally and somewhat tangentially from the tips of the blades of the agitators, it will be readily seen that the air must move in diversified directions at the upper and lower zones of the agitators, and that the air is thoroughly mixed between the agitators. Similarly, when the two agitators at the left side of the machine are viewed from the corridor, the blades of these two agitators turning in the upper zones move toward the front of the machine while the blades turning in the lower zones move toward the rear of the machine; and, hence, the two agitators on that left side will move the air in diversified directions and mix it. In other words, the two sets of agitators on the opposite sides of the machine move the air in different diversified directions. The agitators at the right side of the machine face the agitators at the left side of the machine, and, naturally, the air movement created by the right-hand set of agitators is affected largely by the air movement created by the left-hand set of agitators, thereby creating a thorough and general mixture of all the air in the casing.

The blades of each agitator are four in number and the agi-

tators revolve slowly at a speed of about two hundred revolutions per minute. The slow moving flat blades, few in number, constantly cause a change in the direction of movement of the air, at many points, by reason of, first, the approach of the blades to those points and then the movement of the blades away from those points. As a result of these actions, there is a constantly changing movement of the air, at a great many points, near the side walls, top and bottom of the casing, and elsewhere in the casing. In other words, there is a fluctuating movement and sometimes a pulsating movement, and sometimes a reversing movement of the air at many points within the casing.

Some of the air thrown centrifugally outwardly by the blades strikes the top and bottom walls and moves over and under the egg trays and through and between the egg trays out to the corridor. Some air moves towards the back end of the casing, some towards the front end thereof, some moves up through the egg trays, and some moves down through the trays; but the movement of the air through and between the trays is chiefly in the horizontal plane by reason of the open horizontal passages or spaces between adjacent trays. Some of the air eddies back toward the eyes or centers of the agitators; some of the air moves entirely across the corridor from one side of the casing to the other and from front to rear of the machine; some of the air moves from the left side of the machine toward the right side of the machine out to and in from the corridor; while some moves from the right side of the machine toward the left side of the machine out to and in from the corridor. Other air movements are from front to rear of the machine and from rear to front into and out of the corridor. Air moves in practically every direction, and at many points it reverses its direction of movement from one instant to the next, so that there is no steady or continuous movement in any direction.

The air in the corridor mixes and commingles with other

air moving out to and in from the corridor. *The movement of air between the egg trays is chiefly in a horizontal plane* and is from front to rear, rear to front, in and out, relative to the corridor, to and from the side walls and the front and rear walls.

The air movement in the machine can best be defined as a general mixing, churning, agitating and diffusing movement.

It is true that at certain points there are air movements which might be called currentlets that have an orderly movement toward the eyes of the agitators. This is bound to be true in any chamber where air is circulated in any manner by mechanical means. Air moved by mechanical means in a chamber will, in its feed to the mechanical means, naturally take the paths of least resistance, and be, to that extent, orderly in its travel. When considered as a whole, the air goes where it "listeth" in every direction, but never in columns through a predetermined path.

The air in its movement picks up heat from the heating elements and moisture from the water pans and humidifier. This heat and moisture, by reason of the air movement, is uniformly distributed throughout the casing so that all the air throughout the casing is kept at substantially the same temperature and humidity. The temperature in the casing is maintained substantially constant by the thermostat controlling the heating elements. An amount of air within the casing, corresponding in quantity to the quantity of fresh air taken in through the damper controlled fresh air inlets, is exhausted through the damper controlled exhaust outlets in the top of the casing. This exhausted air carries off the carbon dioxide from the hatching eggs and the supply of needed oxygen is being constantly renewed by the fresh air admitted.

The air moves over, under and about the eggs in the vari-

ous egg trays as stated. The eggs in the various trays are so set that the eggs in the more advanced stages of incubation are sandwiched between eggs in less advanced stages of incubation and the eggs remain where set until ready to hatch. As the air is constantly being mixed, the air striking the colder eggs, *i. e.*, the eggs in the less advanced stages of incubation is at the same temperature as the air striking the warmer eggs, *i. e.*, the eggs in the later stages of incubation. Heat from the air is absorbed by the colder eggs and given up to the air by the warmer eggs. The egg arrangement or setting is such as to take full advantage of radiant heat. By sandwiching colder eggs between warmer eggs, heat is radiated directly from the hotter to the colder eggs and approximately one-half of the heat transmitted is by radiant energy in this manner. This sandwiched type of stage incubation used assists materially in maintaining an even temperature throughout the eggs.

The type of stage incubation used by Snow makes it absolutely impossible for the heated air to be carried first to the eggs in the more advanced stage of incubation and then to those in the less advanced stage.

The air circulation in the Snow machine makes it absolutely impossible for the heated air to be carried first to the eggs in the more advanced stage of incubation and then to those in the less advanced stage, even if the Smith type of stage incubation were used, which is never done.

The air is not circulated in general current form in respondents' machine. It is not circulated in defined paths or channels. There is nothing used in the Snow machine to cause the air to move in current form in defined paths or channels.

Verification of the Fact That Respondents Do Not Circulate the Air in General Current Form When Carrying Out Their Hatching Method.

That the foregoing is a true and correct statement of the Snow hatching method and the air circulation used by respondents will now be verified by the testimony of record.

Both petitioner's expert, Mr. Taggart, and respondents' expert, Prof. Rowley, agree that the Snow agitators, sometimes called paddles, or fans, do not have a true propeller fan action but rather have a stirring or agitator action by throwing out the air centrifugally from the ends of the blades. Plaintiff's expert, Mr. Taggart, in speaking of the Snow agitators, states (R. 101):

> "Now, this type of fan, with the blades set at an angle of 45°, your first thought would be that that would throw the air, push the air out forward. They would if they were placed out in the open but as they are placed here, within an inch and a half of the wall, they cannot feed from behind. That is, no air can get to them from behind, so in their operation they throw the air off centrifugally. As they go around they throw it off centrifugally and we find that the arrows here around the outside of the fans show the direction of the air as it is thrown off from the fans. Now, throwing off the air there, the fan must feed. That is, no fan can throw air unless it feeds from some place and these fans feed almost entirely from the front. That is, the air flows into them in the front, flows into them, is thrown out centrifugally from the fans."

Mr. Taggart's above description of the action of the Snow agitators is corroborated and amplified considerably by re-

spondents' expert, Professor Rowley (R. 203-204). Further, the entire air circulation of the Snow incubator is correctly described by the unbiased and disinterested witness, Professor Rowley, at this point, to-wit:

> "Now, in the Snow incubator—I have described the general structure of it—there are four motor driven agitators. That is, they are driven through a belt, one on each side—or two on each side of the incubator. And those are for the purpose of mixing up the air, agitating it, and stirring it up in the incubator. Now, those agitators are wheels, paddle wheels, which at first sight you might think were designed exactly like a propeller fan. Now, they are so placed and so rotated that if they were used as a fan in the true sense of a fan, they would throw the air outward from the face of it into the center of the corridor. In other words, the pitch of those blades is so set and the blades are so rotated that the tendency, as far as the pitch is concerned, is to throw the air horizontally outward into the corridor.
>
> Now, as a matter of fact, there can't be enough air supplied from the back of those blades and there is a centrifugal force throwing the air off from the ends of those blades and that centrifugal force is stronger than it is to pull it—than the force which propels it forward. Therefore, the air is actually thrown in every direction off from the tips of those blades in a centrifugal—that is, in a plane of rotation, and slightly forward at the ends of the blades. Now, of course, there is all kinds of action going on underneath that we can't explain in detail, back of those blades. The air which is thrown off at the end of the blades, in these various directions is not at the blade, is partly forward, because there is a

double pressure that is a component force, one tangential and the other out into the incubator, you might say. Now, of course, the air must come from some place, and it comes into the center of those fans against the pitch of the blade. Now, I say, into the center of the fans. They are not in a true sense fans. They are agitators, because they aren't working like a fan. If they were fans they would throw the air outward and they would be designed differently. If you had any intention of using them as a fan you wouldn't expect to run them backwards. They pull the air in through the center, through the eye of it. The air is thrown out then at the top, bottom, in every direction from the fan, from where it circulates, partly around the outside housing, and partly out through the trays, back around there, there are eddies, currents all through those trays. That is, we have in the incubator—I have described one of these agitators, there are four of them operating. Now, those four agitators acting together throw the air out from each one of them and those streams of air come together. They mix and diffuse and go all places and directions. If you tried to get the direction back in there, one of those fans, you would find the air is going in every direction. I won't say every, but it is all mixed up. It is a difficult thing to define just where the air current is there, if there is any. Now, of course, you can take agitation or a mixing of that kind and you can find some place in an orderly operating machine where certain currents will go in one general direction, but the general effect of all of those operating together is a turbulence in there, a mixing and agitation of the full air in that incubator. It is just the same as if this large room, only on a different scale, had large paddle wheels on the side

which would mix this air all around in here. We wouldn't expect to find anything except a general mixture. And that is how the paddles in here are mixing the air and distributing it throughout the incubator in different directions, some of it passes into the trays, some of it passes out through the trays. Some of it passes over the trays. Some of it even is stationary. That is, there is much of that air that never even circulates and never even comes to the corridor and down to a mixture in there that is going in practically every direction and you will find many cases in there where it reverses and goes back and forth. It is simply a mixing and agitation of the air in the incubator, and that is the circulation system."

Snow, both on direct examination and cross examination, gives an independent description of the action of his agitators and his description is substantially to the same effect as that given by Taggart and Rowley at the places above identified.

It is clear, from the above identified testimony, that both of the expert witnesses in the case, as well as the respondent Snow, agree on the fact that the Snow paddles, fans or agitators, have an *agitating action,* unlike that of an ordinary propeller fan, and deliver the air centrifugally from the ends of the paddles in tangential different directions, so as to cause a mixing, churning or agitation of the air. In other words, they do not produce a single column of air moving in a predetermined definite path. This action of the Snow agitators or fans is in great contrast to the action of the fans of the Smith machines, which are true propeller fans, and deliver all the air in columnar form downwardly in a single definite path through the corridors.

The two experts and Snow are in agreement that there is

a general mixing of the air in the corridor of the Snow machine. Petitioner's expert, Mr. Taggart (R. 104), states:

> "In the corridor there are numerous places where the air is not in definite form because it becomes a *mixing chamber* where the air currents come in from the ends and from the top and from the bottom. There, there is a curving or mixing before it is drawn back through the trays again and in the corridor you can't say that it is a definite current."

Respondents' expert, Mr. Rowley, and the respondent Snow, all through their testimony, state that there is a general agitation, churning and mixing of the air in the corridor of the Snow machine. Taggart, Rowley and Snow are, therefore, in agreement that there is no defined current circulation of air in the corridor of the Snow machine.

The experts, Messrs. Rowley and Taggart, agree that there are numerous points in the Snow machine where the air movement through the trays is first in one direction and then in an opposite direction.

Although Taggart's test data, "Plaintiff's Exhibits 12 to 12KK" and "13 to 13KK" (R. 473-511), secured from *ex parte* tests made for the purpose of showing a general current movement in respondents' machine, cannot be relied on to show the true air movement in the Snow machine, as we shall later point out, even these tests by Taggart show by combination plus and minus signs that there are numerous points in the Snow machine where there is a reversal of movement of the air or sometimes no movement whatsoever. Mr. Taggart stated (R. 102), when speaking of his tabulated tests, as follows:

> "If there is a plus and minus joined in a circle, as there are in a few places, it means that when the ane-

mometer is placed in that position it does not run steadily in one direction. It may reverse itself or it may not even run at all."

Mr. Taggart relied on anemometers to tabulate both the direction and velocity of air movement in his *ex parte* tests. When the anemometers reverse themselves or do not move at all, this shows respectively that the air reversed itself in direction from one moment to the next or did not move at all.

Professor Rowley in his testimony above quoted (R. 204) states that there are many places in the Snow machine where the air reverses itself back and forth. Later (R. 208-217), Rowley explains the *inter partes* tests that he made on the Snow machine. These tests are in evidence as "Defendants' Exhibits M-1 to M-7" (R. 571-584). These test data sheets show the true air movement in respondents' machine. In making these tests and in tabulating the tests, the person viewing the machine, as shown in the drawings, is considered to be looking from the corridor toward either one side of the machine or the other. The letter "I," designates in movements of air from the corridor toward the side walls, the letter "O," out movements of air from the side walls toward the corridor, the letter "F," movements of air toward the front of the machine, the letter "R," toward the rear of the machine, the letter "U," air movements up, the letter "D," air movements down, the word "MIX," a mixing movement of the air where no definite movement other than a stirring movement could be determined. To determine the air movements, Professor Rowley used smoke and he tabulated the movements of air throughout the machine, in accordance with the direction of movement, or directions of movement of this smoke. Many of the air movements were combination movements such as in and front "IF," out and

up "OU" and there are a great many tabulations of air movements showing that the air reversed itself from one instant to the next, "IOR" in, out and up, "IO" in and out, etc. There were also numerous places where the air was found to mix as shown by the symbols "MIX." This can all be verified by reference to Defendants' Exhibits M-1 to M-7 and from Professor Rowley's testimony (R. 208 to 217), which is too long to quote here, but should be read.

Rowley and Snow on the one hand, and Taggart on the other hand, do not agree as to the general air circulation throughout the Snow machine. Respondents' unbiased and disinterested expert, Professor Rowley, corroborated by respondent, Mr. Snow, testified that the general circulation throughout the Snow machine was a general mixing, churning, agitating and diffusing movement. On the other hand, petitioner's uncorroborated and self-interested, biased expert, Mr. Taggart, contended that the general circulation throughout the Snow machine was in definite and defined paths. We believe and contend that Professor Rowley and Mr. Snow were right in what they said about the air circulation of the Snow machine and that Mr. Taggart was wrong except where corroborated by Rowley and Snow in what he said about the air circulation of the Snow machine.

Of the three witnesses, Snow, Rowley and Taggart, Mr. Snow's testimony is the most reliable to truly state the air circulation under actual operating conditions, for he is the only one of the three witnesses who actually had experience in the operation of the Snow machine under working conditions with the eggs in the incubator and hatching. Under direct examination (R. 150, 151), the questions and the answers given by Mr. Snow are as follows:

> "Q. Now, just describe in detail in your own way, based on your own experience, with the machine, just

how the air is circulated in your incubating machine.

"A. Well, in the incubators, the electric and the steam, the air is circulated the same in both of them. That air, as I said before, is agitated by agitators adjacent to the outer wall in the cooler spots of the incubator, as it would stand to reason, the cooler places would be on the outer wall. That air is being agitated by the four bladed agitators, and run at a low speed, which, as we hope to run them, at about 200 revolutions per minute, or around there. There is some outside fresh air taken in through openings on the side, which is above the center of the agitators; they running at a slow speed causes a certain distribution of the air throughout the incubator, which works and goes out and expels somewhat from the end, and somewhat towards the front and somewhat going back towards the eye of the fan, and, therefore, causing a complete mixture and agitation of the air in the entire incubator. The air is moved over and under the trays and in some places it may have a slight outer movement, but the main movement of the air is more on a horizontal plane in that incubator, and, therefore, eliminating any hot or cold spots, and causes the chicks to hatch at the same time—at the same time in the trays, that are set at the same time, and by having no cold spot or hot spot in the incubator, you get a better quality chick and a better livable chick and a better looking chick, than one which is not properly hatched. There is somewhat greater movement of the air around the outer wall—the entire outer wall and the ceiling and all, to a certain extent, which takes care of any exposure and makes it possible to carry an even temperature throughout the incubator.

"Q. Is there any column of air?

"A. There is no columns of air because it is not necessary to have columns of air, in that incubator. It is simply made on the principle whereby the air can be agitated and moved between the trays at a slow movement to take off any excess warm air that might be there, or any cold air, and it is not necessary to have a large volume or current of air forced in any way through or on the hatching trays or in that incubator.

"Q. Did the test that you saw made of these incubators of your own, either the steam heated one at Sleepy Eye, or the electrically heated one here in Minneapolis, give you any reason to change your own theory of the operation of the air circulation in your own machine?

"A. Not in the least."

The testimony of Mr. Snow, in regard to the air circulation in his machine, was not shaken in the slightest degree under cross examination. Mr. Snow's testimony on this subject is of controlling weight, as everything he says is based on his own actual experience with the machine when the trays are loaded with eggs in actual commercial use. On the other hand, Mr. Taggart's testimony is based on no more than *ex parte* tests made on plaintiff's model of the Snow machine run idle without any eggs in the trays.

The previously quoted testimony of Professor Rowley in this chapter of the brief (R. 203 and 204) show what Professor Rowley considers to be the general air circulation in the Snow machine. This testimony substantiates what Snow has said. At another point, Professor Rowley under cross examination (R. 367), makes a short summarized statement of the air circulation in the Snow machine which reads as follows, to-wit:

"Well, the air goes into the fan, there, and it goes out in all directions, at the peripheries of the fan, and from there it goes to the ceiling, and the floor, to the end walls, and then between the fans, it comes together, of course, to a general mix, and it works its way back into the corridor, where it is agitated; and then it goes through the trays, coming out, and part of it goes around the trays; some of it starts out from the fan toward the corridor, and goes back before it gets out of the corridor; in other words, generally, the currents go in various directions, through the trays and about the trays, and about the machine."

Professor Rowley does not deny that there are some points in the Snow machine where some portions of the air move in orderly fashion, for a short distance, in currents. On page 367 of the record, for example, the following questions put by Mr. Ely and answered by Professor Rowley are found, to-wit:

"Q. And the air, the movement of the air in the Snow machine is in continuance (continuous) and repeated cycles or circuits?

"A. No, not in repeated circuits, not of any part of the air that goes all over the machine; you would not expect any portion of the air to follow the same circuit; these eddy currents go all over.

"Q. Yes. However, the main body—leaving out of consideration one particle of air, the main body of air moves in constantly repeating cycles or circuits, does it not?

"A. I would not say that, no; it mixes all over. Of course, you can find places in there where there are currents in one direction, or you can find areas in there

where there is a general movement, but you could not say that it moves constantly in one direction in the machine."

At one point in the testimony of Professor Rowley, when under cross examination by Mr. Ely, the following question and answer appeared (R. 366):

"Q. And we have a current of air in that Snow machine, do we not?

"A. Yes, we have a current of air through here."

The above statement is seized on by petitioner's brief writers as an admission that in respondents' machine there is a current of the kind defined in claim 1 of the patent. There is, however, no justification for any such interpretation of Professor Rowley's testimony immediately above quoted. In the previous portions of Professor Rowley's testimony he had explained that there was no general current circulation of air in the Snow machine and he had characterized the air circulation as being a general churning and mixing movement; then in portions of his testimony subsequent to the part immediately above quoted (R. 366) and namely (R. 367) above quoted, he again explained the air circulation of the Snow machine and pointed out that there were no continuous currents of air in the Snow machine which travel in repeated circuits in the machine. Hence, it is perfectly obvious that when Professor Rowley spoke of a current in the Snow machine, he meant merely that there was a continuous movement of air in the machine, but not of the kind produced and applied to the eggs in accordance with the disclosure of the Smith patent or by the Smith commercial machine.

Taggart's own *ex parte* test data does not back up his or petitioner's contention that the air circulation of the Snow

machine is by a general current movement passing in definite channels. The white colored portions of his test data, "Plaintiff's Exhibits 13 to 13KK," show that there are large areas through the egg trays where the air is being thoroughly mixed. When testifying about these exhibits, Mr. Taggart (R. 107) stated:

> "There is a space in between that is white and that is where the air is curving back from the blue into the red. *That is in an area of just plain mixing.*"

It will be seen that Taggart admitted that the Snow agitators did not have true propeller fan actions but, on the contrary, they moved the air centrifugally from their tips in all directions; he admitted that in the corridor of respondents' machine there was a general mixing of the air; he admitted that at many points through the egg trays and elsewhere there was a reversal of movement of the air from one moment to the next; and he further admitted that through the egg trays there were places where there was nothing but a mixing movement of the air. In spite of these admissions which conclusively show that the air in respondents' machine did not move in a general current in definite paths or channels, Taggart had the effrontery to say that the air was circulated in respondents' machine by a general current movement wherein the air followed definite channels or paths. Taggart's adverse admissions are absolutely inconsistent with his conclusions. His conclusions are groundless.

From the above it will be seen that the testimony of not only respondents' witnesses, but also the testimony of petitioner's expert witness, show that in respondents' incubator, there is no general air movement in current form moving in defined paths.

No Reliance Can Be Placed on Petitioner's Ex Parte Test Data to Show the Air Movement in Respondents' Incubator.

It has already been pointed out that, wherever uncorroborated, no credence should be given to petitioner's test data, "Plaintiff's Exhibits 12 to 12KK, 13 to 13KK" (R. 473-511), or to "Plaintiff's Exhibit 14" (physical exhibit) used by petitioner in an attempt to show a general air current in respondents' machine, because the test data was prepared from *ex parte* tests on a machine manufactured by petitioner and alleged by petitioner to be a reproduction of respondents' machine. Something more, however, should be said to conclusively prove that this test data does not show the true air circulation in respondents' machine.

"Plaintiff's Exhibits 12 to 12KK" purport to show by anemometer readings and arrows the direction of air circulation and the speed of air travel throughout the respondents' incubator. "Plaintiff's Exhibits 13 to 13KK" similar to "Exhibits 12 to 12KK" with the exception that "Exhibits 13 to 13KK" are colored, purport to show by color the air movement in respondents' machine as determined from the anemometer readings and arrows found on these sheets. The celluloid model, "Plaintiff's Exhibit 14," was colored substantially in conformity to the coloring of certain of the sheets found among "Exhibits 13 to 13KK" and petitioner attempted by this model to show a composite picture of the air circulation through one entire side of respondents' machine.

In addition to these various exhibits made from the *ex parte* tests carried out by petitioner's self-interested expert, Mr. Taggart, petitioner also introduced two, but only two, colored exhibits, "Plaintiff's Exhibits 22 and 23" (R. 523

and 525), wherein Taggart had colored two of Professor Rowley's seven test data sheets put in evidence as "Defendants' Exhibits M-1 to M-7" respectively. From these two colored sheets, "Plaintiff's Exhibits 22 and 23," petitioner attempted to show that Professor Rowley's test data bore petitioner out on his theory of the air circulation in respondents' machine.

The Anemometer Readings and the Arrows on Plaintiff's Exhibits 12 to 12KK and 13 to 13KK Show Neither the True Air Movement Nor the True Velocity of Air Movement in Respondents' Incubator.

Petitioner's expert, Mr. Taggart (R. 101-102), says that he relied on anemometer readings to obtain the direction of air movement in respondents' machine and he recorded the directions obtained in this way by arrows on his test data and he also recorded the speed of air movement determined by the anemometer readings on his test data. He further states (R. 102 and again 399-400) that he did not make friction corrections for the friction of the anemometers in tabulating his readings. His testimony in this respect (R. 399-400) reads as follows:

> "The speed of the air up through the trays, and in the air columns, between the trays, as recorded here, is the record shown by the three inch Biram anemometers of the type which I showed at the demonstration over here. Those anemometers are greatly affected by friction at the lower speeds. They still show direction, but it is necessary to have a big correction to take care of the low speeds. The manufacturers give you a correction chart for speeds from 200 feet to 1,000 feet. Below 200, the friction is of such consequence that they do not give you

a correction chart for those speeds. In making up these charts here, that is the speed that was recorded by those anemometers, and I have already stated on direct testimony that in the making of all of these charts, *I did not make the corrections for friction.* I gave the readings as given by the anemometers. * * * The friction slows the instrument down, and the readings, as I have recorded them here, are accurate, as recorded by the anemometers themselves."

In spite of the fact that Mr. Taggart admitted that he did not make corrections in the recorded readings for the friction of the anemometers and that the friction correction was so great that the manufacturers of the anemometers do not consider the readings of the anemometers sufficiently accurate below a speed of 200 feet per minute to even bother with furnishing a friction correction chart for the purchasers of the anemometers, Taggart still maintained that his readings were correct. Mr. Taggart stated (R. 102) that in preparing his test data he took over 1,500 anemometer readings. Of these various readings, more than 375 readings on "Exhibits 12 to 12KK" can be found showing a speed under 200 feet per minute. Admittedly, therefore, no credence can be given to more than one-fifth of the anemometer readings recorded by Taggart and very little credence can be given to the remaining readings because friction corrections for the anemometers used were not made. No reliance can be placed in anemometer readings so carelessly made and tabulated.

Attention is next called to the use of arrows made by Taggart on his test data in an effort to show current movement in the Snow machine. When referring to "Plaintiff's Exhibits 12AA to 12KK" (R. 102 and following) Taggart

stated that in making his tests the anemometers were placed in planes parallel to the fans of the Snow machine in obtaining the tabulations on his test data through the egg trays. The alleged direction of current movement was shown by arrows on the test data from these tests. Professor Rowley (R. 242-243) when referring to the use of anemometers by Mr. Taggart to show the direction of air movement, states as follows:

> "I don't know whether I have explained it, but if you take an anemometer and take (place) it in a turbulent air current you get component force or the component velocity in the plane of the anemometer, but you do not get the other angle to it. In other words, the anemometer may rotate and show the upward movement of a mass of air, but it does not show the current or the direction of the current in that area only in that component direction, as (is) shown by the anemometer, and, therefore, to begin with, I do not accept an anemometer as a proper means of measuring currents, unless you should have an elaborate mind, an unbelievable mind, respecting these eddy currents, and you should take an unbelievable number of records. It is not scientifically correct, but the data must be presented here for scientific reasons."

As the direction of travel of a sailboat does not show the direction that the wind is blowing driving that sailboat, so an anemometer reading does not show the direction of flow of the air stream that strikes the anemometer. Mr. Taggart attempts to show, by his arrows, anemometer readings and colored diagrams, that there is a general current movement of air in from the corridor of the Snow machine through the egg trays toward the side walls, except midway between the

front and rear walls of the machine, where he attempts to show that there is a general outflow of current to the egg trays. His anemometers, placed in parallel planes to the fans of the Snow machine, merely show the component air movements in and out through the egg trays and do not tell the whole story of air movement or the correct story.

Professor Rowley brought out several times in his testimony and shows in many places on his test data, Defendants' Exhibits M1 to M7, inclusive, that there is air movement front and rear through the egg trays of the Snow machine, and air movement up and down through the egg trays, and that, at many points, the air intermittently changes its direction of movement. As Professor Rowley states (R. 241, 242) when referring to air movement, as shown by arrows on the Taggart test data sheets:

> "It doesn't show anything about it. You are trying to show three dimensions in one plane. You are trying to show the motion or velocity in three dimensions in one plane, and you can't do it, and this shows it."

On R. 244-246, Professor Rowley points out that at many places on the Taggart test data sheets there are similar points shown in different exhibits in both vertical and horizontal planes through the Snow machine where anemometer readings are illustrated and arrows are used to show the direction of air movement. At many of these points, the arrows shown in the vertical views point in one direction and the arrows in the horizontal views point in an entirely different direction. If views and readings in other planes were illustrated, arrows would be found which showed still different directions. All this goes to show that the arrows on Taggart's test data cannot be regarded as showing true air movement. Although Mr. Taggart (R. 401, 402) makes an at-

tempt to justify the use of his arrows on his test data, in answer to Professor Rowley's criticism as to his use of the same, he fails miserably in his attempt. He says (R. 402) that the different planes should be taken into consideration when making any interpretation of the arrows. This would be almost impossible to do and would still give no true picture of the air circulation, because at most the vertical and horizontal views of the Taggart test data would only show component forces in two directions, while there are component forces of air movement in all directions.

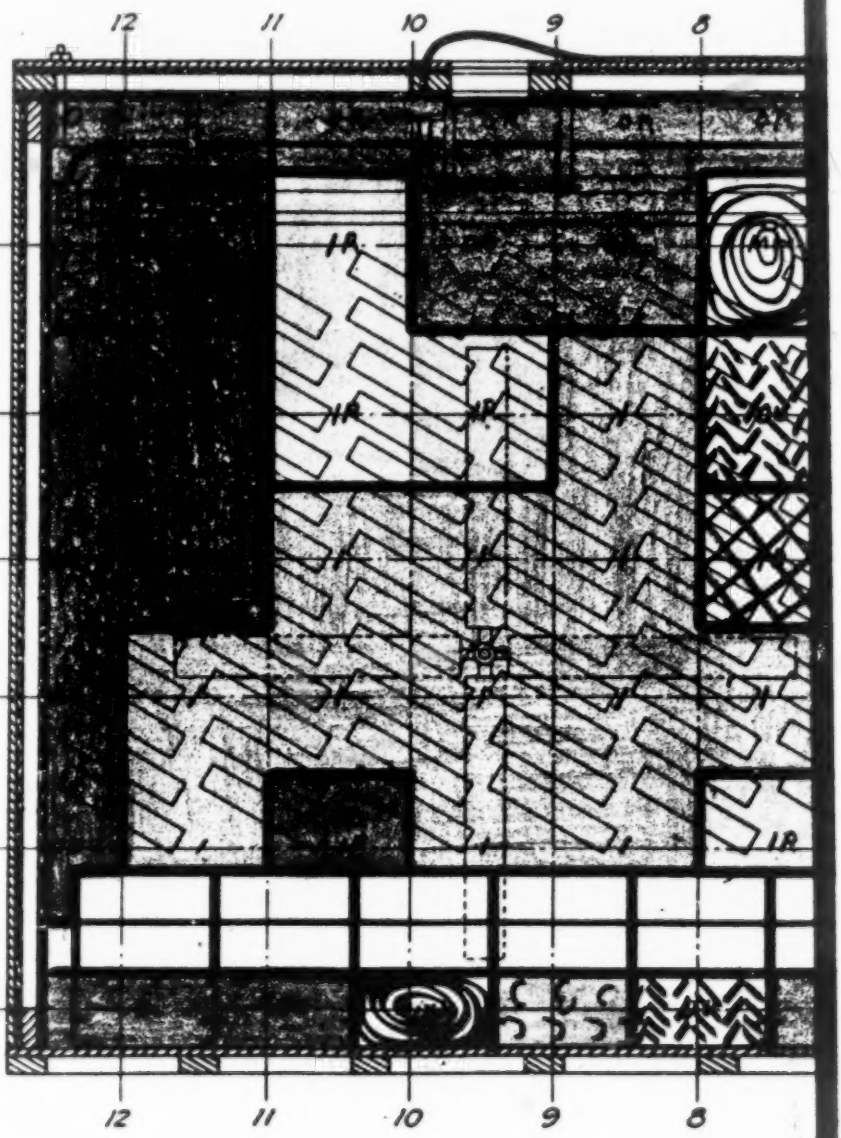
No reliance whatsoever may be placed on the arrows in the Taggart test data to show direction of air movement.

Plaintiff's Exhibits 13 to 13KK and 22 and 23 Colored by Taggart Do Not Show the True Air Movement in the Snow Incubator.

The red and blue colors applied to Plaintiff's Exhibits 13 to 13KK mean nothing because that coloring was placed on those colored exhibits through interpretation by Taggart, of the air movement in the Snow machine, by use of anemometer readings and arrows. It has been above pointed out that those anemometer readings and arrows cannot be relied on because, at most, they designate no more than the components of air movement in or out from the corridor of the Snow machine and not the true air movement.

It seems to be admitted by Petitioner's expert, Mr. Taggart, that Professor Rowley shows the true air movement of the Snow machine in Defendant's Exhibits M1 to M7 for Taggart has attempted to show the air movement in the Snow machine by coloring up with red and blue crayon, Defendant's Exhibits M4 and M6, these colored sheets being introduced in evidence as Plaintiff's Exhibits 22 and 23. Although

Data on line D D Test Diagram



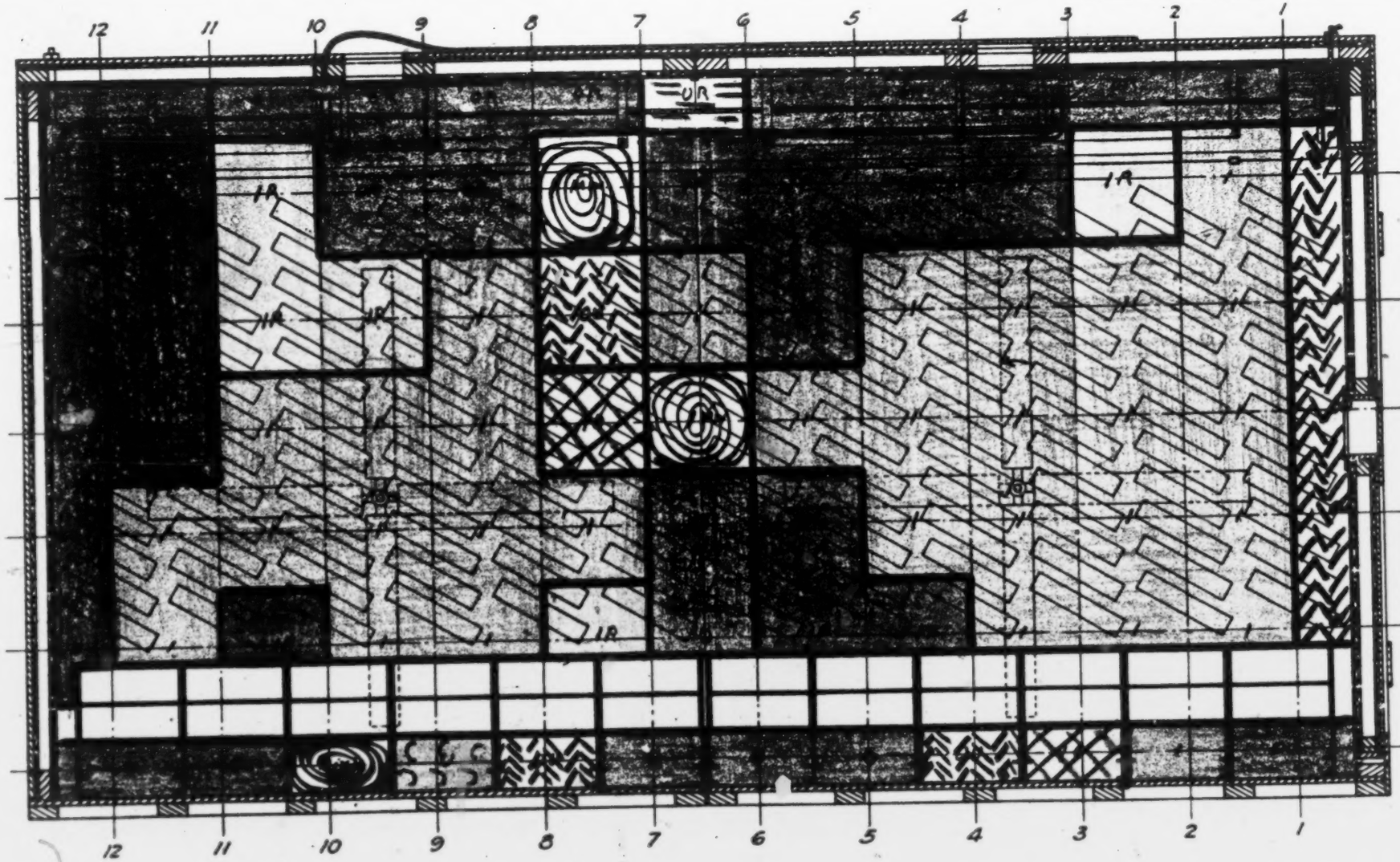
No. 119 Ex

DATE Nov14-32

TIME 2301B - 255

SHEET 2

Data on line D D Test Diagram No1



ARGUMENTATIVE DIAGRAM No. 1

ON DEFENDANTS EXHIBIT M-6

TEST DIAGRAM NO.3

Frank B Bowles SNOW INCUBATOR

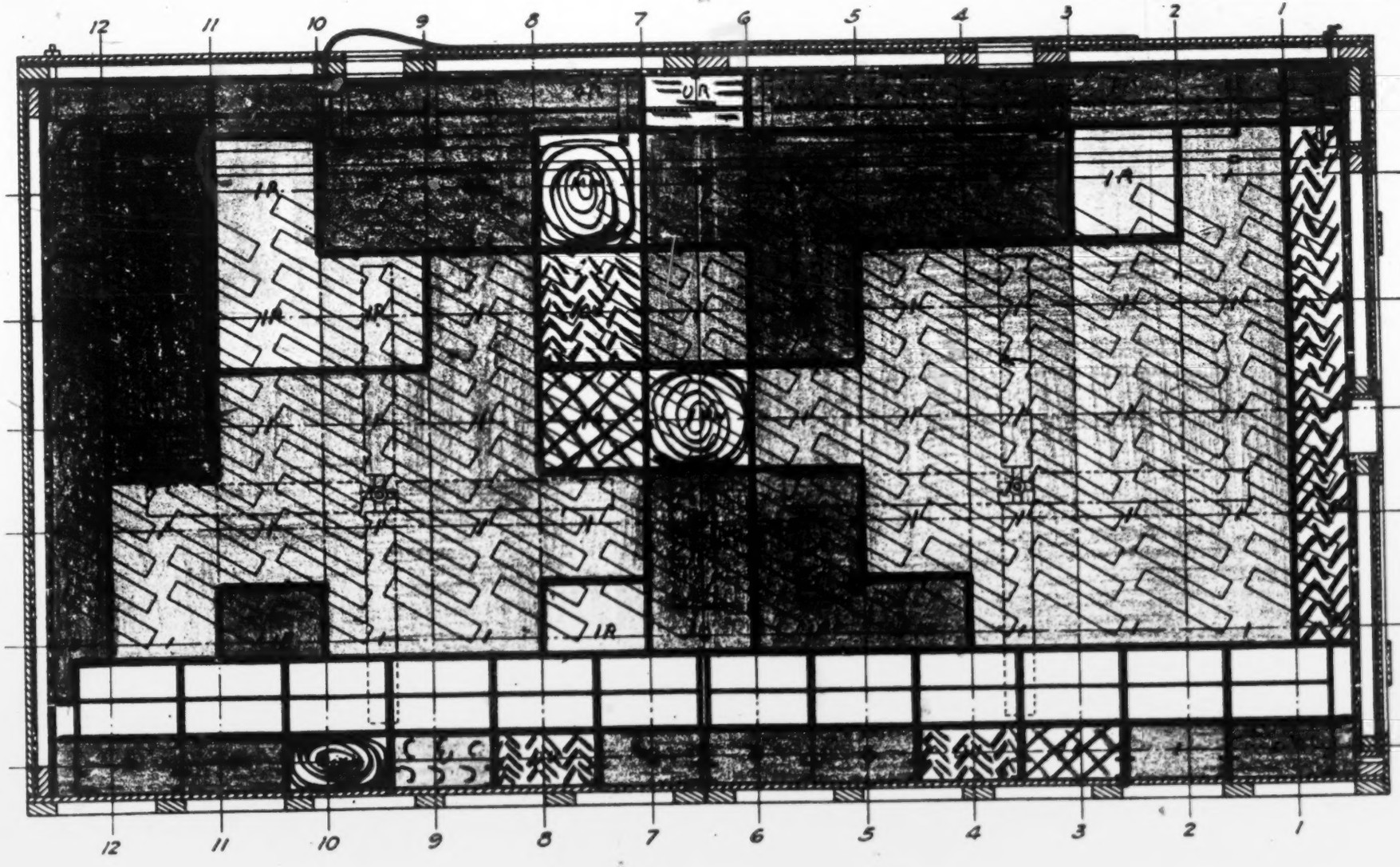
COLOR LEGEND:

1-In IR-In Rear 10-In Out OU-Out Up

Data on line D D Test Diagram No 1

TIME 2:30 B - 2:55

SHEET 2



ON DEFENDANTS EXHIBIT M-6

TEST DIAGRAM NO.3

Frank B Rowley SNOW INCUBATOR

COLOR LEGEND:

I - In		IR - In Rear		10 - In Out		OU - Out Up	
O - Out		ID - In Down		OR - Out Rear		UR - Up Rear	
U - Up		IF - In Front		OD - Out Down		MIX - Mix	

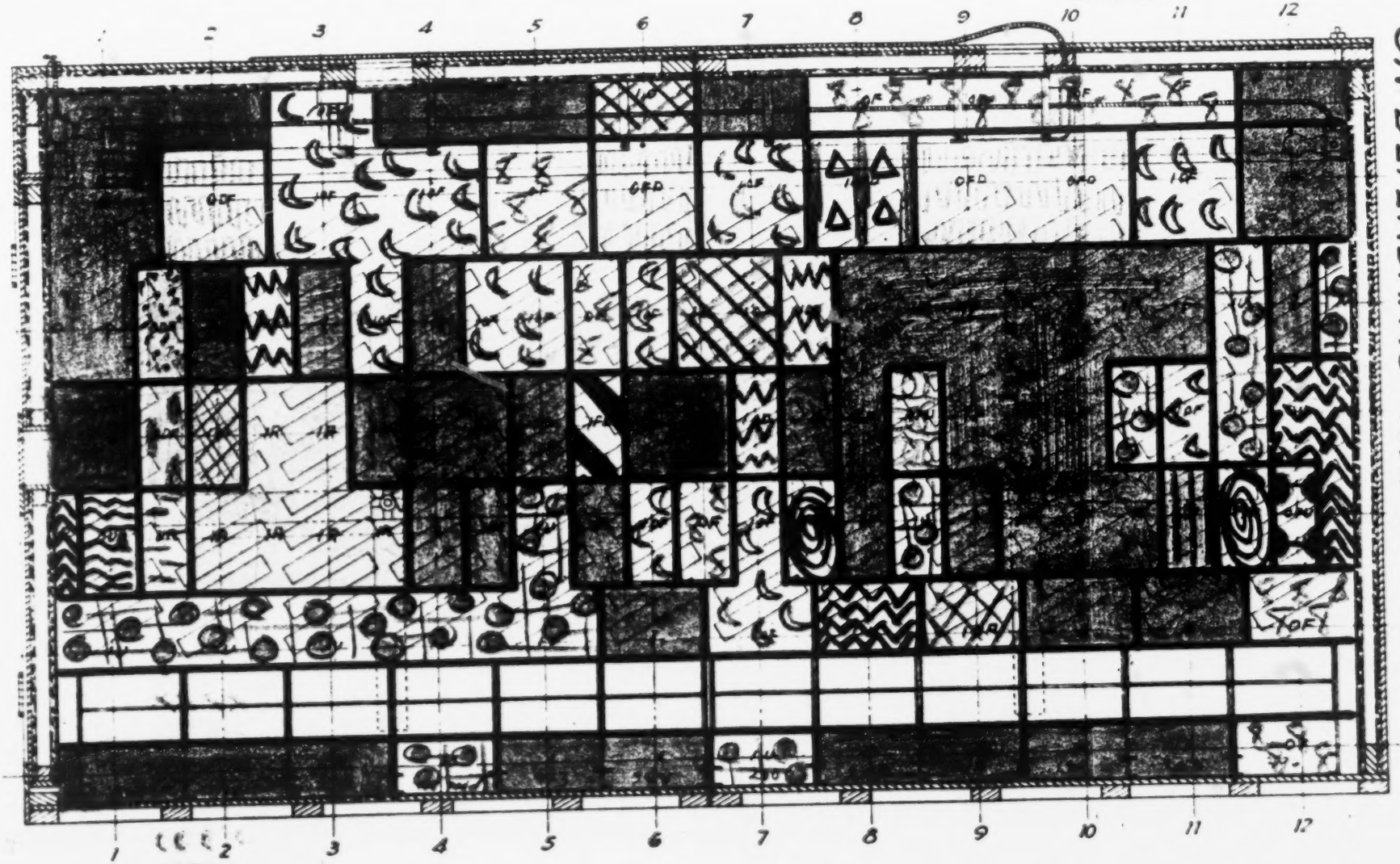
No. 3119 Ex

DATE Nov. 14 -32

TIME 3 20

SHEET No 1.

Data taken on line AA Diagram No 1



ARGUMENTATIVE DIAGRAM No. 2
ON DEFENDANTS EXHIBIT M-2

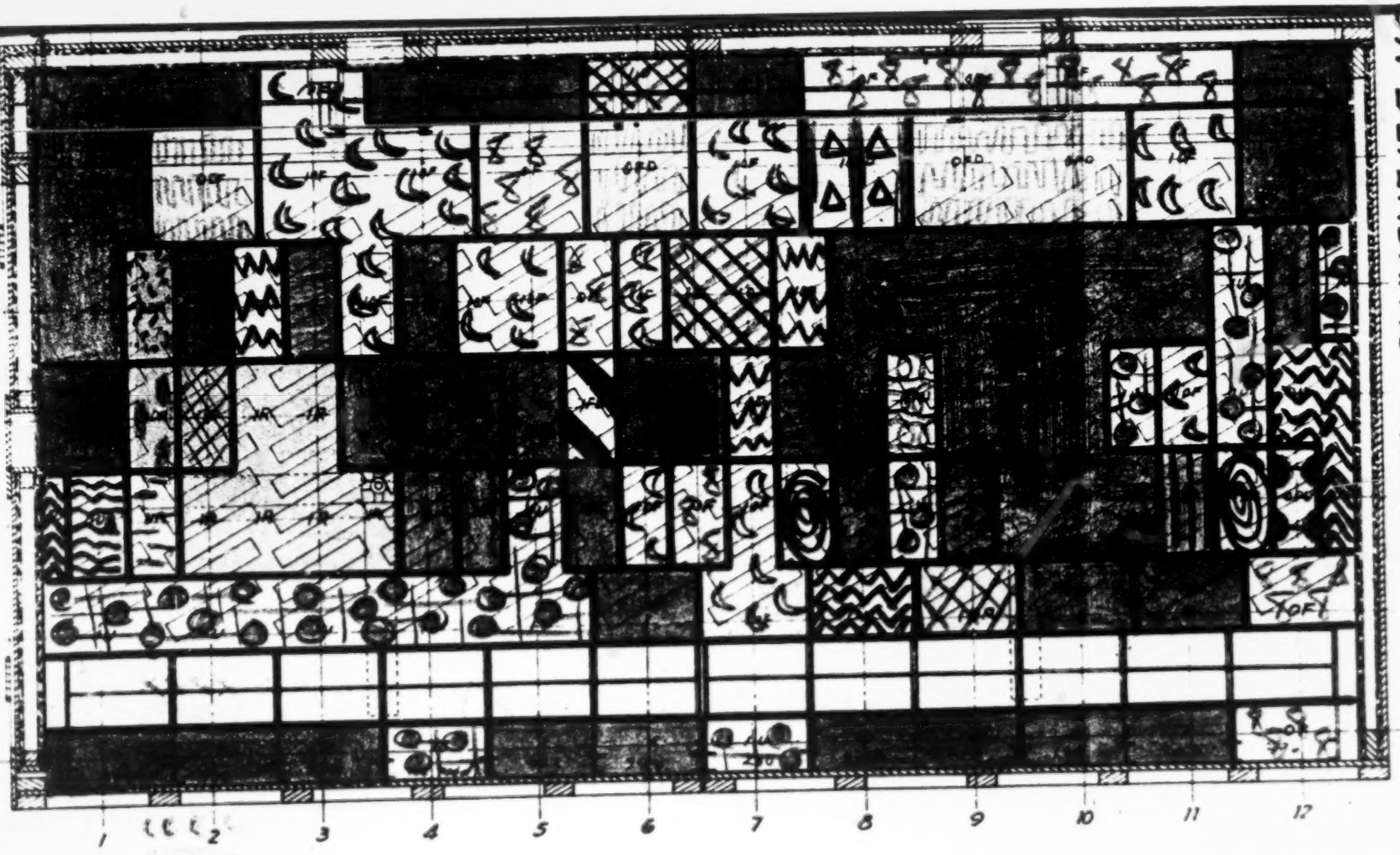
TEST DIAGRAM NO 2
SNOW INCUBATOR

Franklin Pond

COLOR LEGEND:

I - In	IU - In Up	IOFD - In Out Front Down	OUR - Out Up Rear
O - Out	IOD - In Out Down	OR - Out Rear	ODR - Out Down Rear

ARGUMENTATIVE DIAGRAM NO. 2
ON DEFENDANTS EXHIBIT M-2



TEST DIAGRAM NO 2
SNOW INCUBATOR

COLOR LEGEND:

I - In
O - Out
U - Up
IR - In Rear
ID - In Down
IF - In Front
IO - In Out
IU - In Up
IOD - In Out Down
IOF - In Out Front
IFD - In Front Down
IOR - In Out Rear
IFU - In Front Up
IDR - In Down Rear
IOFD - In Out Front Down
OR - Out Rear
OD - Out Down
OU - Out Up
OF - Out Front
ODF - Out Down Front
OFU - Out Front Up
OUR - Out Up Rear
ODR - Out Down Rear
UR - Up Rear
UF - Up Front
MIX - Mix

Taggart colored Rowley's test diagrams, Taggart did not color the diagrams to show the true air circulation that Professor Rowley's tests prove. Rowley's tabulations on his test diagrams, Defendant's Exhibits M4 and M6 as well as the tabulations on his other test diagrams, Defendant's Exhibits M2, M3 and M5, show some places where there were straight movements of air in or out from the corridor of the Snow machine. These places where there are straight in and out movements of the air are designated on the test diagrams by the letter "I" designating "in" and the letter "O" designating "out" without other letters. Most of the movements of air through the Snow machine, however, were diagonal movements designated by combination letters, such as "IF," meaning in front; "OU," meaning out up; "IDR," in, down and rear, etc. Where there was a reversal of movement from one instant to the next, this was designated by the letters "IO" in out, or often by any combination of letters such as "IF" which often means that the air fluctuated in its movement from a straight in movement to a straight front movement, etc.

Taggart, in coloring Rowley's test diagrams, Plaintiff's Exhibits M4 and M6, disregarded all diagonal movements of air and many fluctuating or reversal movements of the air and with the exception of the points where letters "IO" are found together or in combination with another letter, he colored every point in the machine where there was an "I" found, with the red crayon irrespective of whether the "I" was combined with one or more other letters or not, and he colored every point in the machine where there was an "O" found, with the blue crayon irrespective of whether the "O" was combined with one or more other letters or not. In other words, he interpreted every movement of air which might be diagonally in and up, diagonally in and front,

diagonally in front and up, etc., and which might be fluctuating from in to front, or from in to up, etc., as a straight in movement and he colored this all red. Further, he interpreted every movement of air which might be diagonally out and up, diagonally out and front, diagonally out front and up, etc., and which might be fluctuating from out to up or from out to front, etc., as a straight out movement, and he colored this all blue. His colors mean nothing to show air movement.

If colors are to be used to show true air movement in the Snow machine by applying these colors to the Rowley test data, Exhibits M1 to M6, then a great many colors and colored patterns must be used to show the different types of air movement throughout the machine. Color should be applied not only to sheets which show the movement of the air in vertical planes approximately midway between the corridor and the two side walls, as Taggart was careful to apply only his color to, but color should be applied to other sheets which show the movement of air in other vertical planes through the egg trays.

Respondents' brief writers have had prepared and have had inserted in this brief, on pages opposite the heading to this section of the brief, two colored diagrams designated respectively "Argumentative Diagram No. 1 on Defendant's Exhibit M6" and "Argumentative Diagram No. 2 on Defendant's Exhibit M2."

In the Argumentative Diagrams No. 1 and No. 2, there has been used a different color, or a different colored pattern, for every different air movement found by Professor Rowley in his *inter partes* tests on the Snow machine and tabulated on Defendant's Exhibits M6 and M2, respectively. A color legend showing the significance of each color or colored pattern is placed on each diagram. The straight in and out

movements have all been colored respectively solid red and solid blue and examination of the solid red and blue colored portions of the two Argumentative Diagrams will show how little true in and out movement there really is in the Snow machine. How far off Mr. Taggart was in interpreting the true air movement in the Snow machine may be gauged by comparing the red and blue portions of the Argumentative Diagrams with the red and blue portions of Plaintiff's Colored Exhibits 22 and 23. A composite view of the air circulation in the Snow machine, when different air movements are properly interpreted by different colors placed on a Rowley test data sheet, looks like a crazy quilt. It is to be remembered in examining the Argumentative Diagrams that every different color used, and every different colored pattern used, designates a different air movement, as shown and explained by the colored legends found on the Argumentative Diagrams. It is submitted that these diagrams correctly visually show by color the true air movement in the Snow machine, if color can be used for showing this movement.

When "Argumentative Diagram No. 1 on Defendant's Exhibit M6" is compared with Plaintiff's Exhibit 23 which was colored by Taggart on Defendant's same Exhibit M6, the contrast between the true air circulation in the Snow machine and the abortive air circulation that Mr. Taggart would like to have believed takes place in that Snow machine, is strongly enough brought out to show that Taggart's theory of air circulation should not be accepted. But Argumentative Diagram No. 1 does not tell the entire story, and for this reason Argumentative Diagram No. 2 is also used. It has been pointed out that Taggart colored up only two of Defendant's Exhibits M1 to M6. He was careful to choose the two Exhibits M4 and M6 that would best support his unwarranted

contention of a general air current moving in defined paths in the Snow machine. He failed to color up any other of Rowley's test data sheets M1 to M6 than the two sheets M4 and M6 which show the air movement in the vertical planes taken on the lines B-B and D-D of Defendant's Exhibit M1. The entire air circulation of the Snow machine must be considered, however, if one is to obtain a true insight into or true knowledge of this air circulation. Why did not Taggart color up one or more of Defendant's Exhibits M2, M3 and M5, instead of coloring up only two sheets showing the air movement in identically the same vertical planes at opposite sides of the machine? Defendant's Exhibits M2, M3 and M5 show the air movement in the near ends of the egg trays, as viewed from the corridor, and in the corridor. To show the colored picture of air circulation at the near ends of the egg trays at one side of the Snow machine, Respondents' brief writers have included, in this brief, "Argumentative Diagram No. 2 on Defendant's Exhibit M2." There are over twenty different types of air movement at this point of the machine, as shown by the different colors and different colored patterns in Diagram No. 2. When this Argumentative Diagram No. 2 is considered, with Argumentative Diagram No. 1 it will be perfectly obvious that there is nothing but a general agitation, mixing and churning movement of the air in the Snow machine, and that there is no current of air moving continuously in defined paths in that machine, in endles cycles.

Plaintiff's colored Exhibits 13 to 13KK, and 22 and 23, are worthless to show the air circulation in the Snow machine and they merely go to show to what unjustified extremes petitioner's self-interested witness, Taggart, went to obscure the true air circulation in that machine before the trial court. The same may be said of the celluloid model,

Plaintiff's Exhibit 14, which was colored by Taggart in conformity to the coloring on Plaintiff's colored Exhibits 13 to 13KK.

Conclusion as to Non-Infringement.

Although it has previously been shown that respondents do not infringe claim 1 of the Smith patent for numerous other reasons, it has now been conclusively shown that respondents in their hatching method do not utilize a general current circulation of air in defined paths or channels, and that, therefore, respondents do not infringe the claim for the reason that they do not use a current of air of the type called for in the claim.

CHAPTER V.

ARGUMENT CONTINUED.

SOME OF THE FALLACIOUS CONTENTIONS IN PETITIONER'S BRIEF.

A number of the fallacious contentions in petitioner's brief have already been exploded. His main contention which underlies his whole argument, to-wit—that in accordance with the Smith disclosure the air moves over and over the eggs in continuous cycles and, therefore, it makes no difference as to the sequence in which the air first strikes the eggs in the different stages of incubation and, accordingly, that the claim is not limited to cover merely a method of incubation wherein the air moves first to the eggs in the advanced stages of incubation and thence to the eggs in the less advanced stages of incubation—has been completely exploded in Chapter III, Sections 1 and 4 of this brief. It was there conclusively established that in accordance with the disclosure of the Smith patent the air does not move in closed cycles, but on the contrary, fresh air in quantity, and moisture are introduced at the beginning of each circuit of air movement and this fresh air and moisture vitalize all the air moving to the eggs for the essential purpose of causing the vitalized air to be carried first to the eggs in the advanced stages of incubation. The claim is, therefore, definitely limited to a method of hatching wherein the air moves first to the eggs in the advanced stages and then to the eggs in the less advanced stages.

There are numerous other fallacious contentions made by petitioner in his brief. Attention will be briefly called to a few of these.

Fallacious Contention That Increasing the Volume and Velocity of Air Circulation Is the Mechanical Equivalent of the Use of Curtains.

Petitioner contends that the fans in respondents' machine are of such capacity and create such a volume of air that they generate the direct and definable current of the claim without the use of means for guiding or directing it (Petitioner's Brief, p. 38). In Chapter IV of the respondent's present brief, it has been conclusively shown that there is no "direct and definable current" in respondents' machine when it is in operation. Even if it were admitted, therefore, as contended for by petitioner, that speeding up the fans in the machine of the Smith patent is the equivalent to utilizing the fans as disclosed in the patent with curtains to direct and guide the air movement, respondents still would not infringe the claim for the reason that the definite and defined air current of the claim is not present in respondents' hatching method.

Respondents, however, vigorously deny petitioner's statement found on page 55 of petitioner's brief that "The increase in volume and velocity" (of the fans) "is the mechanical equivalent of the curtains for it secures the same current movement of air as is secured in Smith." The specification of the patent may be searched in vain in an effort to find any statement or suggestion that an air circulation equivalent to that disclosed could be secured by eliminating the curtains and speeding up the fans. In the same paragraph where the function of the curtains is brought out (patent specification page 2, lines 53 to 78), it is stated that "It is obvious that the fans can be so arranged and can be operated at such speed as to cause the hot air to circulate fast enough to keep the temperature throughout the chamber between the

limits of 100° and 105°," but it is not stated that the curtains can be eliminated to secure the proper air circulation. The chief problem, as brought out in the patent specification, was to carry off the heat from the eggs in the advanced stage of incubation and to do this it was necessary to secure a high velocity of air current about the eggs in the advanced stage of incubation. When the eggs were set in the only manner disclosed in the Smith patent, it was absolutely essential that the curtains be used to carry the current "around and about each egg" of the eggs in the most advanced stages. High velocity to the eggs in the most advanced stages could only be secured by use of the curtains.

The fact that the incubators sold by petitioner's licensees, the Smith Incubator Company, and the Buckeye Incubator Company were always equipped with curtains or corresponding partitions and that these companies always advised the use of curtains or partitions in the commercial machines (R. 78) is convincing evidence that the Smith hatching method could not have been carried out successfully without the use of curtains. Mr. E. H. Snow who had operated all kinds of incubators for years, including a number of the Smith machines, testified (R. 158-159), as follows:

> "Q. As that Smith incubator is organized in the specimen used by you, did you ever attempt to use it without curtains in the corridor?
>
> A. No.
>
> Q. In your judgment, could it be used without those curtains successfully—
>
> A. No.
>
> Q. Why not?
>
> A. Because it would permit to let air go in different directions, and would not reach the bottom stage of in-

cubation, forcing the air around and taking the air from the advanced stage of incubation up through the others, and would be liable to cause what I would term irregularity.

Q. Irregularity in what?

A. In the incubator throughout.

Q. In the hatching?

A. Yes, in all phases of the incubator. It is made with partitions, or with curtains, and they are made there to be used that way, and they have been proven out, that that is the way that they endeavor to run the Smith incubator."

Petitioner's self-interested expert, Mr. Taggart, practically admitted that in the Smith commercial machine the heat could not be taken off the eggs in the most advanced stage of incubation properly, if the curtains in the Smith machine were eliminated. Under direct examination (R. 78) he made the following answer to the following question:

"Q. You are prepared to demonstrate, with the curtains removed, what happens?

A. You would still have air currents up to the egg columns in all points *except in the lower part or the columns near the corridor,* and there the fan current would be going down for a short distance, that is, near the bottom of the curtains, and then curving back up, but with the curtains we get a little more uniform and better distribution of the air in the back corners of the machine."

Taggart, in his above statement, made it clear that there would be little or no movement about the eggs in the lower parts of the machine or the eggs near the corridor with the curtains removed. As a result, the heat could not be re-

moved from the eggs in the most advanced stages or the proper air circulation given to the eggs near the corridor of the machine. This confirms what Mr. Snow stated in his testimony above quoted.

However, this question as to the equivalency of fan speed and curtains or partitions in the corridor of the Smith machine is not really involved in the issues here before the Court.

If the relied upon claims can, by any possibility, be treated as valid, they must be given the narrow interpretation and scope accorded thereto in the Petersime case, the Blum case, and the Hillpot case, and also be further limited by including Smith's special peculiar form of stage incubation, wherein the said eggs were shifted successively downward, as pointed out in Chapter III of this brief. When so construed, it is perfectly clear that if the curtains or partitions are removed from the corridor, Smith's alleged method of hatching eggs cannot be carried into effect by any such a machine, even if the fans were speeded up to a greater speed than used in the Smith commercial machine.

Fallacious Contentions That the Claim Should Be Given a Broad Interpretation Because Smith Was a Pioneer Inventor and Because of the Commercial Success of Petitioner's Incubator Business.

On page 5 of petitioner's brief, petitioner contends that Smith was the first one to use, in a practical way, the heat developed by eggs in the advanced stages of incubation for supplying heat to the eggs in the less advanced stages, so as to stabilize the heat in a chamber wherein eggs in both advanced stages and less advanced stages were placed. In spite of this contention, it is admitted, pages 46 to 50, of peti-

tioner's brief, that the patents to Stulik, Winkler and Zimmer and the article disclosed in Ure's Dictionary and relating to the Bonnemain incubator, each discloses a hatching method wherein eggs at different stages of incubation are placed in the same chamber. Of necessity, therefore, in the hatching methods disclosed in these prior patents and publication, heat from the eggs in the advanced stages must have been transmitted to the eggs in the less advanced stages both by radiation and convection currents. We need look no further through the prior art than to Smith's own prior public usage during the years 1913 and 1914, at Cleveland, Ohio, to find air circulated by fans in a closed chamber containing a large number of eggs. All that Smith did at most, when the prior art is considered, was to discover that by use of a shifting and grouped type of stage incubation of the same order as that disclosed in the Winkler patent, he could hatch eggs by utilizing curtains or equivalent partitions to direct a current of air, forced by fans of the type he used in his old prior art machine, through the eggs arranged in his type of stage incubation in columns first to the eggs in the advanced stage and then to the eggs in the earlier stage.

It is not denied but that Smith made a commercial success out of his incubator business. But this may be attributed as much to his good management as to anything else. There is no evidence in the case to show that manufacturers of other incubators, wherein stage incubation and forced draft were used, did not enjoy a large commercial success in spite of the many suits brought under the Smith patent. The fact that usages of the Petersime machine, the Blum machine and the Hillpot machine, in all of which stage incubation and forced draft were present, were declared not to infringe the patent, indicates clearly that Smith had no monopoly on the business of selling or using incubators utilizing stage incuba-

tion and forced draft and that other such incubators were commercially in use.

Petitioner is not entitled to a broad interpretation of claim 1 of his patent either because of his alleged invention or because of the fact that he made a commercial success out of his incubator business. He is entitled only to the narrow interpretation of the claim given by the C. C. A. Eighth in the instant case.

GENERAL CONCLUSION.

It has now been conclusively shown that the Circuit Court of Appeals for the Eighth Circuit did not err in holding that respondents had not infringed claim 1 of the Smith patent in suit; in dismissing the complaint; reversing the decree of the District Court; and in refusing the relief prayed for in the bill of complaint.

It has also been conclusively shown that the Circuit Court of Appeals for the Eighth Circuit did not err in restricting claim 1 of the patent to a definite order or arrangement of eggs.

The Circuit Court of Appeals for the Eighth Circuit did not restrict claim 1 of the patent in suit to the precise arrangement of eggs described in the specification of the patent and although one of the errors alleged to have been assigned and to be argued in petitioner's brief was to the effect that the said Court had erred in restricting claim 1 of the patent in suit to the precise arrangement of eggs described in the specification of the patent, there is no basis in fact for assigning such an error because it was not stated by petitioner that such an assignment of error was to be urged at the time the petition for writ of certiorari was filed.

It has, therefore, been shown that none of the errors that could properly have been urged by petitioner, were made by the Circuit Court of Appeals for the Eighth Circuit.

It is, accordingly, respectfully submitted that the decree of the Circuit Court of Appeals for the Eighth Circuit should be affirmed, with costs to respondents.

Dated this 21st day of November, 1934.

Respectfully submitted,

JAMES F. WILLIAMSON,
RALPH E. WILLIAMSON,
Counsel for Respondents.

APPENDIX.

PRIOR ADJUDICATIONS OF THE SMITH PATENT 1,262,860 IDENTIFIED.

Buckeye Incubator Co., et al., vs. Wolf, D. C. N. D. Ohio, May 9, 1923, 291 F. R. 253:

Two of Smith's patents were sued upon, including the one here in suit as to claim 1 as well as other claims thereof. The decision was by Judge Westenhaver and he held all the claims to be valid and to have been infringed. However, he made no effort to determine the exact meaning and scope of the relied upon claims. On the contrary, said Judge, on page 256 of the reported decision, made the following statement, to-wit:

> "The claims need not be specifically stated. No question of invention or infringement turns on a close construction of all or any of the claims."

Wolf vs. Buckeye Incubator Co., et al., C. C. A. 6th, March 4th and April 11th, 1924, 296 F. R. 680:

The decree of the trial court by Judge Westenhaver was affirmed without any effort on the part of the Circuit Court of Appeals to determine the exact meaning and scope of the relied-upon claims 1 and 2 of the Smith patent.

Buckeye Incubator Co. vs. Cooley, D. C. N. J., Apr. 23rd, 1925, unreported:

The decision of the trial court in this case was rendered by District Judge Bodine. The method claims of the Smith patent 1,262,860, were in issue and held valid and infringed, but no effort was made to determine the exact meaning and scope of said claims.

Buckeye Incubator Co., et al., vs. Cooley, C. C. A. 3rd, Feb. 8th, 1927, 17 F. R. (2) 453:

The trial court was here affirmed as to the validity and infringement of the method claims 1, 2 and 3 of the Smith patent 1,262,860, but no effort was made to determine the exact meaning and scope of said claims. The decision of said Circuit Court of Appeals was written by Circuit Judge Wooley, who also wrote the decision of said Court in the Hillpot case, 24 F. R. (2) 341, and he, in the first sentence of the third paragraph on page 342 of that decision, made the following remark in respect to the Cooley case, to-wit:

> "In the Cooley case, infringement was so plain there was no occasion to construe the claims."

A similar remark, applying both to the Wolf case and the Cooley case was made by Judge Westenhaver in his decision in the Blum case, 17 F. R. (2) 456, wherein on page 457, he made the following statement (Italics ours):

> "Defendant uses an incubator known as the Aero, made by the Aero Incubator Company, Springfield, Ohio. The question in this case is whether the hatching method of this apparatus is an infringement. It is an open question now to be determined *for the first time.* In the former litigation, the apparatus held to infringe was an exact copy of Smith and it was unnecessary to determine with exactness the scope of the method claims. It was then said: 'No question of invention or infringement turns on a close construction of all or any of the three claims.'"

Buckeye Incubator Co., et al., vs. Stone, D. C. Oregon, unreported. Master's Report filed Jan. 26, 1926:

This case was tried before a Master-in-Chancery and no

serious attempt was made to determine the exact meaning of the claims of the Smith patent. The patent was declared valid and infringed.

Buckeye Incubator Co., et al., vs. Boling, D. C. Indiana, Feb. 8, 1926, unreported:

This case was tried before Judge Thomas W. Slick who dismissed the plaintiff's bill of complaint for non-infringement. The case, although not reported, was referred to in the decision of District Judge Hough in a later case entitled *Boling vs. Buckeye Incubator Co., et al.,* D. C. S. D. Ohio, May 18, 1929, 33 F. R. (2) 347, wherein the structure and mode of operation of the Boling incubator involved in the said Indiana case was described on pages 340-351 of Judge Hough's decision.

Buckeye Incubator Co., et al., vs. Petersime, et al., D. C. Ohio, Sept. 17, 1926, unreported:

The case was tried before Judge Hickenlooper and he rendered an oral decision and approved a written memorandum thereof Sept. 17, 1926. From the decision of the C. C. A. for the Sixth Circuit 19 F. R. (2) 721 on the same case, it is clear that method claims 1, 2 and 3 of the Smith patent were in issue.

Judge Hickenlooper made an extensive review of the prior art then before him and indicated that, in his judgment, Smith had made no contribution to that art involving patentable invention but being constrained by a prior decision of the Circuit Court of Appeals for the same Circuit, he treated the said claims as valid, but held, that when distinguished from the prior art the claims in issue were of narrow scope and distinguished from the method of hatching eggs practiced by defendant in that case and dismissed the bill for non-infringement. In the next to the last paragraph of

Judge Hickenlooper's decision, he made the following statement:

> "* * * the patentee has voluntarily, and apparently, with reliance upon the idea that it was a marked step forward, included in each of his process claims the element of sequence in which the heated air would be applied to the eggs, first, to those of the most advanced stage of incubation, and last to those just placed in the incubator.
>
> "This element of the process is entirely lacking in defendant's device. There is no definite defined sequence *of applying the air currents; the eggs are all* in one chamber in which the air is thoroughly mixed and the heat is applied uniformly alike to all stages of incubation.
>
> "Under those circumstances we are constrained to hold whether viewed as a combination patent or as a process that there is no infringement."

Buckeye Incubator Co., et al., vs. Petersime, et al., C. C. A. 6th, June 10th, 1927, 19 F. R. (2) 721:

The hearing was before Circuit Judges Dennison, Moorman and Knappen. Circuit Judge Moorman wrote the decision. In said decision the said Circuit Court of Appeals for the Sixth Circuit did carefully consider and construe the method claims 1, 2 and 3 of said Smith patent and affirmed the trial court. In said decision said Circuit Court of Appeals pointed out the differences between the three method claims in issue and then, respecting claim 1, made the following statement:

> "It is thus to be seen that all of the claims call for a current of heated air limited in claims 2 and 3 to power-driven and vertically directed. The question is whether

the broader phrase of claim 1, 'applying a current of heated air' includes the agitation of air, not in defined current but so that it will produce a diffusion of heat units resulting in uniformity of temperature.

"Looking to the language of the claims, as indeed to the device that Smith uses, it would seem that he had in mind a process by which the warm air taken into the corridor would be currently directed, so as to strike first the eggs in the more advanced incubation, take to them the additionally needed oxygen, and carry the heat units therefrom to other parts of the two compartments, thus effecting in part, at least, a uniformity of temperature throughout the egg chambers. This interpretation, we think, is borne out by the specification."

Then after making some specific references to the specification of the Smith patent, the said Circuit Court of Appeals made the following statements:

"The file-wrapper history of Smith's patent tends to support the same conclusion. This conception of a current of air driven in a definite or predetermined direction is different, we think, from the Petersime process, by which diffusion of heat units and uniformity of temperature is obtained by the slow stirring or agitation of the air in the egg chamber.

"Judgment affirmed."

Buckeye Incubator Co., et al., vs. Blum, D. C. N. D. Ohio, Feb. 14, 1927, 17 F. R. (2) 456:

The decision was written by District Judge Westenhaver. Claims 1 and 2 of the Smith patent 1,262,860 were held valid, but to be of such narrow scope, when distinguished from the prior art and the estoppels arising from the file-wrapper record that they were not infringed by the defendant's

method of hatching eggs and the bill of complaint was dismissed.

Buckeye Incubator Co., et al., vs. Blum, C. C. A. 6th, July 6, 1928, 27 F. R. (2) 333:

The hearing was before Circuit Judges Dennison and Moorman and District Judge Anderson. The trial court's holding of infringement was affirmed on the single ground that in the usage of the Blum machine Smith's current was not employed. Said C. C. A. did not pass on the question as to whether or not claim 1 of the patent was otherwise limited as held by the trial court.

Buckeye Incubator Co., et al., vs. Hillpot, D. C. D. N. J., Aug. 4, 1927, 22 F. R. (2) 855. Decision by District Judge Bodine:

Claims 1 and 2 of Smith patent 1,262,860 were in issue and held to be of narrow scope when distinguished from the prior art and the estoppels arising from the file-wrapper record and although treated as valid, were held not infringed by the defendant's method of hatching eggs and plaintiff's bill was dismissed.

Buckeye Incubator Co., et al., vs. Hillpot, C. C. A. 3rd, Feb. 10, 1928, 24 F. R. (2) 341:

The hearing was before Circuit Judges Buffington, Wooley and Davis. The opinion was written by Circuit Judge Wooley. Careful independent effort was made to determine the true meaning of the method claims of said Smith patent and the trial court was affirmed.

Buckeye Incubator Co., et al., vs. F. & H. Hatchery, et al., D. C. S. D. Illinois, Nov. 30, 1928, unreported:

In this suit the patent was declared not infringed. Defendant in the suit had purchased incubators from the pat-

entee's licensee and had merely increased the capacity of these incubators.

Boling vs. Buckeye Incubator Co., et al., D. C. S. D. Ohio, Western Div., May 18th, 1929, 33 F. R. (2) 347:

This was a suit to restrain the defendants from bringing suits against plaintiff's customers in view of the prior adjudication in the Indiana case identified above, and the prayed-for injunction was granted. The structure of the Boling incubator involved in the said Indiana case is described on pages 350 and 351 of this decision.

Buckeye Incubator Co., et al., vs. Boling, C. C. A. 6th, Feb. 13, 1931, 46 F. R. (2) 965:

The trial court was reversed as to injunction and injunction dissolved.

Buckeye Incubator Co., et al., vs. Miller Hatcheries, Inc., D. C. E. D. Mo., March 6, 1929, unreported:

All of the claims of Smith patent 1,262,860, and 1,263,138, were in issue and held valid and infringed. Defendant's machines in that case, however, were simply original Smith machines which had been modified to get increased capacity and the trial court held this was not a matter of legitimate repairs but a reorganization in accordance with the Smith patent.

Miller's Hatcheries, Inc., et al., vs. Buckeye Incubator Co., et al., C. C. A. 8th, May 19th, 1930, 41 F. R. (2) 619:

The hearing was before Circuit Judges Booth and Gardner and District Judge Sanborn. The decision was written by Judge Booth. The trial court was affirmed. Under the doctrine of comity, the claims in issue were treated as valid because of the prior adjudications thereof and no attempt, whatever, was made to determine and state the exact mean-

ings and scope of claims 1 and 2 of the Smith patent 1,262,860 in suit.

Samuel B. Smith, et al., vs. Waxham, D. C. S. D. Cal., Central Division, June 30, 1932, unreported:

This was the decision by the District Court in the Waxham case now before the Supreme Court on writ of certiorari. The case was tried before a Master and the District Judge, Judge McCormick, approved the Master's report in his order of June 30, 1932. Claims 1 and 2 of Smith patent 1,262,860, were held valid and infringed, but the Court admitted that the question of infringement was a close one. His own words on that point are as follows:

> "The only debatable issue here is that of infringement because of the limitation as to order of eggs within the incubator under a proper interpretation of claim 1 of the Smith patent 1,262,860. *I believe this question to be close.*"

Samuel B. Smith and Buckeye Incubator Co. vs. Jensma, Smith & Nampa Hatcheries, D. C. Idaho, Oct. 7, 1931, Vol. 1 Fed. Sup. 999:

Claims 1 and 2 of the Smith patent 1,262,860 were here held valid and infringed; but no attempt was made to determine the true meaning of said claims when distinguished from the prior art and the estoppels arising from the file-wrapper record of the patent. The second paragraph of the said decision includes statements to the following effect (Italics ours), to-wit:

> "* * * the issue of non-infringement is presented by the pleadings under the claims sued on. *No evidence was offered by the defendants* to refute the undisputed testimony of the plaintiffs, which clearly shows that the defendants have made and are using incubators embody-

ing the inventions shown in plaintiff's patent, particularly, claims 1 and 2 thereof, in infringement of its rights."

Then the last paragraph of said decision reads as follows (Italics ours):

> *"No accounting for profits or awards for damages* are requested by the plaintiffs as they were waived at the trial and the relief granted is the prayer of plaintiffs for an injunction."

From said quoted statements it is perfectly obvious that this was really not a contested case, but a case conducted practically with the consent of both parties for what amounts simply to a consent decree. It has the earmarks of a collusive suit. Obviously it has no weight as to the meaning and scope of claim 1 of the Smith patent 1,262,860 there in suit.